FINANCIAL TIMES
No. 27,079
Wednesday September 22 1976
**10p

CONTINENTAL SELLING PRICES: AUSTRIA Sch.13; BELGIUM Fr.22; DENMARK Kr.3; FRANCE Fr.2.50; GERMANY DM1.70; ITALY L.400; NETHERLANDS Fl.1.75; NORWAY Kr.3; PORTUGAL Esc.17.50; SPAIN Ptas.35; SWEDEN Kr.2.75; SWITZERLAND Fr.1.70.

EWS SUMMARY

ERAL

avy sts st 10 s dead

n crewmen missing from ittleton have been listed esumed dead, the Royal said. It has ordered three e ships from the Royal me Auxiliary Reserve to ecover the minesweeper.

ier, there had been a faint that the men might be n an air pocket in the 360- ttleton, which sank in the Sea about 80 miles off d after she was in col- with the frigate Mermaid nday night.

Dutch salvage vessels started to lift Fittleton. hile, 32 survivors arrived wich on the Mermaid and aken to hospital. The Mer- has been diverted to Ports- for repairs. Malaysia, planned to buy the frigate, ked for details

ende Minister ed by bomb

rlando Letelier, Chilean ce Minister when the ist President Allende was rown, was killed, ently by a bomb planted s car, as he was driving the Chilean Embassy in ngton. The blast also a woman on the staff of Transnational Institute of Studies, of which Letelier irector. Back Page

ith 'to accept id transfer'

nia expects that Mr. Ian . the Rhodesian Prime ter, will announce his tance of a rapid transfer to rity rule in a public speech riday. President Nyerere res that Mr. Smith has ted the "Callaghan condi- " which in essence provide majority rule in Rhodesia 18 months to two years. Page

nefits warning

nley Orme, Social Security er, warned that employers, ll as claimants, would be uted, where there was ce of collusion in illegal for social security benefits. 12

Wm. Collins

illiam Collins, 76, head of blishing company, died at me near Tonbridge. Dur- is 31 years as chairman, published many best- , including Pasternak's Zhivago, and books by a Christie, Joy Adamson, ond Innes and Alistair n. Obituary, Page 10

ker killed

roker Mr. Charles n, of Capel-Cure Myers, his death yesterday from ghth floor of the firm's at Bath House, High n. A colleague said he personal problems."

g charged

Vigg, 75, appeared at Marl- h Street court, charged sing insulting behaviour don's West End. Counsel e former Labour Minister ously denied the allega- The case was adjourned at defence's request until ber 4.

fly . . .

4,000 teachers and parents a demonstration outside shire county hall against d cuts of £3.25m. in next county council education

idgeshire police have been d to seize cigarettes from y or girl under 16 seen g in public.

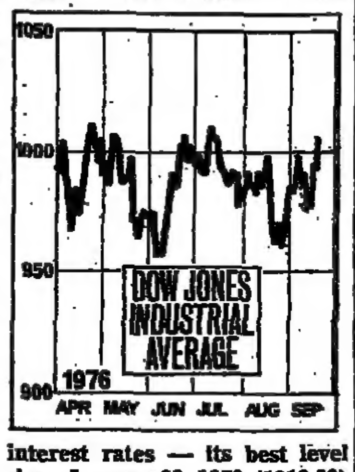
2 cosmonauts were t to be returning to earth a Soviet news agency d that they had completed raphing in space.

Margaret Thatcher left for Bangkok after a nine- it to Australia.

BUSINESS

Wall St. up 20.28 at 1,014; £ falls

● WALL STREET climbed 20.28 to a new 1976 "high" of 1014.79 on optimism over falling inflation and the trend to lower



interest rates — its best level since January 23, 1973 (1018.66) and the first time the Dow Jones Index has passed 1000 since July 14 this year (1003.32). The advance was the strongest since the 22 point rise on August 29, 1975.

● EQUITIES rally continued, with the FT 30-Share Index showing a further rise of 6.1 to 345.8 (a two-day gain of 11.3). Mines Index closed 10.6 higher at 122.4.

● GILTS longs gained to ½: shorts to $\frac{5}{16}$. Government Securities Index put on 0.26 to 59.87.

● GOLD rose $4½ to $119½.

● STERLING fell 60 points to $1.7170. Weighted average depreciation was unchanged at 42.2 per cent. Dollar's widened to 2.90 per cent. (2.68).

● NATIONAL Enterprise Board has committed itself to more than £130m. new loans and share purchases since its inception last November, the Board's interim statement says. A £29.1m. profit after tax is almost entirely attributable to British Leyland. Page 12

● GROSS DOMESTIC product second-quarter growth was probably less than ¼ per cent., latest Central Statistical Office estimates show.

Poland orders £34m. machines

● POLAND has placed orders for £34m.-worth of U.K. machinery for expansion of its automotive and tractor industries. Back Page

● BSC's iron-making problems have been made worse by a shortage of iron output at its Scunthorpe works. Back page

● MANPOWER SERVICES Commission has approved the first two "work experience" schemes under a £19m. plan for unemployed teenagers. Page 15

● ENERGY DEPARTMENT has cleared the way for a substantial list of applicants for fifth-round offshore exploration licences. Page 16

COMPANIES

● HAW PAR Brothers International announced a loss of S$8.59m. after tax, minorities and extraordinary items for the first half of this year. Page 34

● EAGLE STAR first-half pre-tax profits advanced to £15.8m. (£12.9m.) despite a £2.4m. underwriting loss (£0.1m. profit). Page 29 and Lex

● BICC first-half pre-tax profits advanced to £20.83m. (£17.26m.) on sales of £426.8m. (£375.8m.). Page 29 and Lex

● BANK OF Scotland group profit before tax increased to £11.26m. (£7.42m.) in the half year to August 31. Page 31 and Lex

F PRICE CHANGES YESTERDAY

s in pence unless otherwise indicated)

RISES		
y 8½pc '80-82	£86¼	+ ½
ry 6½pc '93-98	£51¼	+ ¼
ross	19	+ 3
and Smithers	165	+ 7
	104	+ 6½
k and Wilcox	70	+ 5
's Bank	247	+ 9
	340	+ 7
(J.)	305	+ 25
r Siddeley	374	+ 8
e	405	+ 15
and Garton	200	+ 21
ws (B.)	92	+ 6
(H.)	127	+ 9
Lamp	918	+ 43
	47	+ 8
Org.	147	+ 7
ntnl.	228	+ 8
rd Chartered	328	+ 9
Stocklake	27	+ 6
Travis and Arnold	81	+ 5
Union Discount	283	+ 10
United Biscuit	112	+ 8
United Newspapers	220	+ 10
Royal Dutch	£40	+ 1¼
Tricentrol	70	+ 6
Bandanga	40	+ 5
Charter Cons.	127	+ 10
Coronation	82	+ 8
Falcon Mines	115	+ 20
Free State Geduld	£11¾	+ 1
Grootvlei	82	+ 10
Leslie	39	+ 7
Loraine	98	+ 14
Mangula	110	+ 10
Poseidon	75	+ 10
Wankie	46	+ 6
FALLS		
Bucknall Trust	14½	− 3½
Lothian Inv. Trust	23	− 3
Ozalid	97	− 6

Workless adults at post-war peak: trend still rising

BY MICHAEL BLANDEN

The trend of unemployment has continued upwards, with the number of adults out of work reaching a post-war peak of over 1.3m.

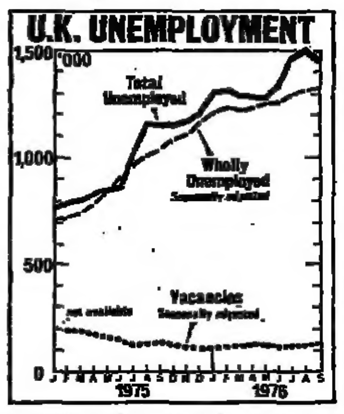
With a large number of school-leavers finding work, the total of people out of work in the U.K. has dropped back from the level of over 1.5m. reached in August to 1.46m. It is the first fall since May. But the continued rise in the underlying trend provides new material for the attack on Government policies by the Labour Party Left wing, which is expected to be a major theme of the party conference.

The figures for mid-September published yesterday brought sharp reaction from a number of Labour MPs, with Mr. Eric Heffer suggesting, for example, that the unemployment issue would dominate the conference.

The Government view, however, remains that the underlying level of unemployment could soon reach its peak, levelling off and perhaps even turning down before the end of this year. While recognising special problems such as that of school leavers, officials see signs that the basic growth rate in unemployment has slackened.

In spite of doubts over the strength of economic recovery, highlighted by the sluggish growth shown in yesterday's second-quarter gross domestic product figures, an optimistic view is being taken of other recent indicators of expansion in the demand for labour.

These include continued rise in the vacancies available and evidence of increased overtime working. This is regarded as a



necessary first step in economic recovery, with employers making the best use of their existing labour resources before starting to take on new employees.

The removal of 53,645 school-

Editorial comment Page 18
Map and Plea by Ulster Page 12
Work experience schemes Page 15

leavers from the unemployment register for the U.K. as a whole has helped to reduce the overall figure. But after allowing for seasonal influences, the figure showed an increase of 9,900 to give a total wholly-unemployed in the U.K. of 1,319,300, or 5.6 per cent. of the working population.

Excluding Northern Ireland, the rise in Great Britain was 9,200 to 1,265,700. The rate of increase, it is argued in Whitehall, shows an encouraging down-trend. After the exceptional jump in Great Britain of 38,000 in July, the trend has moved back in line with the average levels over the past seven months.

The trend of vacancies continued upwards for the eighth successive month, with an increase of 11,300 in the number notified to employment offices—mainly for adults—to a total of 139,347 for Great Britain. After seasonal adjustment, the increase was only 1,000, to a total of 126,700.

Further encouragement is taken from the details of flows on to the register, which show a slight drop in the numbers joining this month at 376,000 and an increase in the numbers leaving. Evidence of overtime working being collected by the Department of Employment as an indicator of the level of activity also shows a rise up to July.

These background indicators are consistent with the view that a recovery in economic activity could be reflected in a better employment trend. While the short-time working estimates show a sharp deterioration, with 65,000 on short time in mid-September against 30,000 in August, the rise is accounted for

Continued on Back Page

Brussels opposes British plan for 50-mile limit

BY ROBIN REEVES BRUSSELS, Sept. 21.

THE EUROPEAN Commission is *likely to reject British and Irish* demands for exclusive fishing zones of up to 50 miles in its new proposals for revising the Common Fisheries Policy (CFP) to take account of 200-mile limits.

This became clear here to-day from the Commission's new draft fisheries proposals covering both revision of the CFP and mandates for negotiations with non-EEC countries on reciprocal fishing rights, which are due to be formally endorsed by the 13-man Commission to-morrow.

Last night Mr. Anthony Crosland, the Foreign Secretary, said that Britain planned to adopt 200-mile limits from January 1, 1977, preferably in concert with the rest of the Community; but, if necessary, alone.

Prepared under the auspices of Mr. Pierre Lardinois, the Commissioner responsible for fisheries, the Commission's proposals for revising the CFP not only ignore the repeated British pleas for exclusive national fishing up to 50 miles offshore but may well be interpreted, through British eyes, as offering less than *the Commission's February guide-*lines which proposed eventual exclusive national bands of 12 miles.

As the Commission's draft now *stands it proposes maintaining* indefinitely the excusive bands between six and 12 miles offshore enshrined in the U.K.'s treaty of accession to the EEC. Under the treaty such exclusivity was due to be phased out after 1982, allowing access right up to the shoreline for EEC fishermen.

But unlike the February document, the new Commission draft plan lays down that traditional fishing rights be maintained in six to 12 mile offshore zones instead of being phased out.

The only concessions to the U.K., and for that matter Ireland, would seem to be the possibility of creating new exclusive zones six to 12 miles offshore, and special catch quotas for coastal regions particularly dependent on fishing. Such quotas would come out of the reserve quota which the Commission has proposed setting aside from global *quantity of fish calculated* to be available in Community waters.

This in turn would be shared out among EEC national fleets on the basis of past fishing performance. *For policing quotas,* the Commission proposes a whole range of measures including a system of community licensing of fishermen.

The possibility of last minute amendments at to-morrow's meeting of the Commission's 13-man executive cannot be ruled out. But they are not expected to make any tangible difference. By all accounts, national interest is proving very much in evidence on this issue which means that the two British Commissioners, Sir Christopher Soames and Mr. George Thomson, plus Dr. Patrick Hillery, the Irish Commissioner, are bound to be outvoted. Controversial issues are settled by a straight majority vote binding on the whole Commission.

U.K. stand welcomed Page 39
Editorial comment Page 18

Just like the old days

BY KEITH LEWIS, CITY STAFF

It must have seemed like old times on the Stock Market yesterday with news of two bid battles and an agreed bid, all on one day.

Tate and Lyle has increased its offer for Manbre and Garton, Herbert Morris rejected the advances of Babcock and Wilcox and APV made an offer for Hall-Thermotank which has been accepted by holders of over 53 per cent. of the equity.

Lex, Back Page, Babcock bid, Page 33; Thermotank News Analysis, Page 12.

Tate offer raised

TATE AND LYLE'S decision to raise its bid for Manbré and Garton from 170p cash per share *to 200p appears to have won* over a large body of the institutions, if not the support of the Manbré Board.

Tate picked up 27½p per cent. of the Manbré equity through the market yesterday. Together with the 4 per cent. acceptances received for its original bid, this raises the Tate stake to 31½ per cent. Manbré shares jumped 21p yesterday to 200p.

The new Tate bid, which values Manbré at £46m., will be extended formally to-day to October 8, the last date possible under the City Code's limit of 60 days.

The Manbré camp immediately rejected the *new offer* because it was inadequate and unacceptable on employment and monopoly grounds. Earlier it had issued a statement to the effect that it will be sending out a profits forecast next week for 1976-77. Outside suggestions are that this will emerge at between £12½-13m. pre-tax.

Babcock bid rejected

BABCOCK and Wilcox, which on Monday bought a 37.7 per cent. stake in crane manufacturers Herbert Morris from Amalgamated Industrial, encountered an immediate rejection to its 120p a share cash bid from the Morris Board.

The offer poses a problem for the Office of Fair Trading which must decide whether to advise the Secretary of State for Prices and Consumer Protection on a possible reference to the Monopolies Commission. The previous owner of the holding, Amalgamated Industrial—had its own bid turned down by the commission and was advised to reduce its stake to less than 10 per cent.

The Office of Fair Trading was made aware of Babcock's intentions in advance But this is not seen as an indication that clearance will necessarily be a formality. The Babcock advisers, Barclays Merchant Bank, were sufficiently encouraged by the discussions with the office to go ahead.

Herbert Morris shares ended 9p up last night at 127p.

Thermotank agrees

A STRAIGHTFORWARD situation is the agreed offer by process engineering group APV *Holdings for Hall-Thermotank*, a manufacturer of heating and ventilation equipment, worth £11.4m. The outcome appears to be almost settled.

Certain key members of the Board, together with P and O—which has a holding of about a third in H-T—have accepted the bid in respect of a combined holding of 53.35 per cent. of the Ordinary capital.

Hall-Thermotank shareholders are being offered one Ordinary share in APV—250p last night—plus £2.75 of 10½ per cent. Convertible Unsecured Loan Stock, 1997/2002, for every six H-T. The bid, worth 87½p a share, came too late to be fully reflected in the H-T share price which closed 5p higher at 75p.

The offer is subject only to the normal conditions and to confirmation of a forecast from H-T that pre-tax profits for the year ending September 30, 1976, will be at least £3m.

Improved offer made to seamen

By Christian Tyler, Labour Staff

SHIPOWNERS yesterday offered leaders of the National Union of Seamen a number of improvements to allowances designed to avert a national strike, threatened from Sunday midnight, without contravening the voluntary pay policy.

Negotiations on the offer took *all day and extended into the* night as the two sides went all-out for a settlement to end seven months of disagreement, culminating in the intervention of the TUC to get the earlier strike deadline extended.

The outcome of last night's discussion of four items claimed by the seamen was due to be considered by the union's 18-man executive to-day.

January rise

A pay rise of £2.50-£4 from next January will be included in any settlement.

Seamen, including at least one member of the executive, waited outside the employers' offices in the City as the 22-strong union negotiating committee met about 25 shipowners' representatives.

Through the day the two sides spent less than two hours together as they built up their positions for the horse-trading that was to follow.

Of the four demands being considered, the one for compensation for unpaid standby duty, or "captive time" on board ship, was the one the employers were least willing to concede.

The other demands are for an increase in fall back pay; extension of an overseas currency allowance, at present paid only for North and Central America; and an increase in travelling and subsistence allowances.

Fresh claim

The two sides were negotiating over what is virtually a brand new claim, devised in consultation with the TUC Economic Committee, and following rulings by both the TUC and the Department of Employment, as the seamen's earlier claim for £6-a-week rises from July this year would breach the social contract.

With several of the NUS executive's vocal Left-wingers represented on the negotiating committee, it was expected that any settlement would meet little further opposition from the executive, the only body authorised to call off the strike.

£ in New York

—	Sept. 21	Previous
Spot	$1.7156-7166	$1.7225-7335
1 month	1.36-1.31 dis	1.30-1.24 dis
3 months	3.86-3.81 dis	3.95-3.87 dis
12 months	13.35-13.25 dis	13.50-13.30 dis

Accountants' discipline to be probed

BY MICHAEL LAFFERTY

A MAJOR review of its own investigatory and disciplinary powers is to be carried out by the Institute of Chartered Accountants in England and Wales, the U.K.'s main accountancy body. This follows severe criticisms of several accounting firms in a number of recent Department of Trade inspectors' reports.

A special committee is being set up to carry out the review and it is expected to include not less than two representatives drawn from outside the accountancy profession. The City and the legal profession are likely to be involved.

The chairman of the committee has not yet been selected but he is unlikely to be a partner in a major accounting firm. The Institute is concerned that he should be seen as "independent" of those most likely to be the subject of possible investigation.

The matters which the committee will examine include the present limitations upon the Institute's investigatory and disciplinary powers, including particularly its lack of power to require third parties to disclose matters known to them, and the practical implications of requiring *members to disclose informa*tion which may prejudice their legal position.

Some of the latter problems are believed to have arisen in the case of the Institute's investigation into criticism of Harmood Banner (now part of Deloittes), the former auditors of London and County Securities, following publication of a Department of Trade inspectors' report in January.

The question of how to deal with cases of non-compliance with accounting and, when they are issued, auditing standards is another matter which the committee will be asked to consider.

At present, the acouning bodies can only ask company finance directors and auditors to comply with such standards.

The committee will also have to decide whether it would be in the public interest for lay representatives to participate in disciplinary hearings against *chartered accountants*, as well as "the adequacy of the variety of penalties currently available" to the Institute.

The accounting bodies have *already established* an Auditing Practices Committee to work out *minimum auditing standards for* accountants but so far no proposals have been published.

The profession is also reacting to current criticisms by raising *its educational standards*

Accounting firms have been criticised in the following Department of Trade reports, all of which have been published in the past year: *London and* County Securities; Blanes and Bernard Russell; Vehicle and General; Lonrho: and Ralph Hilton Transport Services. Al*most 20 other reports have still* to be published.

Lombard Page 2

Investigation of SUITS

SHARE dealings in Scottish and Universal Investments by Sir Hugh Fraser, chairman, and other directors over the past 18 months are to be investigated by a high-ranking committee of the Stock Exchange Council. The company's auditors, Touche Ross, are resigning. Back Page

FEATURES

ON OTHER PAGES

For latest Share Index 'phone 01-246 8026

LOMBARD

Accountants in disarray

BY MICHAEL LAFFERTY

THE BRITISH accountancy profession is in disarray. Several of the country's largest and best-known accounting firms, as well as a number of smaller ones, have either been accused or admitted serious failings in carrying out their professional duties. Yet, if past experience is anything to go by, it is unlikely that any of them will be subject to either legal or professional investigation and discipline, where appropriate.

Only last week a Department of Trade inspectors' report on the collapsed Ralph Hilton Transport Services company (later known as Roadships) roundly accused leading city accountants, Thomson McLintock of failure to "exercise reasonable skill and care" in the preparation of a prospectus. It also stated that Thomson McLintock failed to exercise reasonable skill and care in advising Industrial and Commercial Finance Corporation (ICFC), the bank-backed institution which sponsored the Ralph Hilton flotation.

Unbelievable

The previous week saw the almost unbelievable admission by Touche Ross, another major firm, that it had inadvertently overlooked a misclassification of two loans totalling £4.7m. as a bank deposit in the accounts of Scottish and Universal Investments. As a result the firm is to resign from the audit. In July a Department of Trade report on Lonrho made certain criticisms of Peat Marwick Mitchell and its co-auditors, Fuller Jenks Beecroft (now part of Mann Judd).

Before that there was the Tremletts case in which Arthur Young McClelland Moores and other parties made an out of court settlement of about £½m. with the company and the Haw Par/Slater Walker affair where the same firm, although absolved of any blame, met with criticism in a Singapore Government inspector's report. But with the possible exception of the Ralph Hilton/Thomson McLintock affair the most striking and far reaching criticism of an accounting firm came last January in a Department of Trade report on London and County Securities, the failed secondary bank.

There the inspectors concluded that the auditors, Harmood Banner (now part of Deloittes), should not have signed unqualified audit reports on the L and C accounts, or those of a subsidiary, at March 31, 1973. They added that "the main extent of inflation of the cash balances was known to the audit partner, Mr. Plummer, and it was so serious as to make the accounts misleading to a material extent."

Thomson McLintock, Touche Ross, Peat Marwick Mitchell, Mann Judd, Arthur Young McClelland Moores, Deloittes—an incomplete list by all accounts, lacking the company of other equally famous partnerships only by the grace of God or that of the Department of Trade.

Alternatives

This is obviously bad for public confidence in the whole City and for the reputation of the profession which has so far seemed incapable of handling the matter. The Institutes of Chartered Accountants in England and Wales, Scotland and Ireland have shrunk from what seems to be an enormous task—there are about 10,000 accounting firms in the country—partly because of backwoodsmen who have been known to go in for disruptive tactics. It has also been suggested that it would be wrong for professional institutes to set themselves up as judge and jury on their own members. In any case auditors are in theory open to legal action.

The trouble is that shareholders are hardly ever willing to take auditors to court because of the enormous costs involved. Yet it is clearly not enough to set high professional standards if they are not enforced. The profession has two alternatives. It can either make a sensible effort to tackle the job itself, or it can ask the government to intervene. The latter course would surely lead to the establishment of a Securities and Exchange Commission on American lines. But with the experience of forty years of the SEC it is highly questionable whether that would be the best solution.

The only credible alternative is for the profession to establish a semi-independent disciplinary tribunal with the support of the Stock Exchange, and including a number of "lay" members. The tribunal should have the right to censure accounting firms on similar lines to the Takeover Panel, and the Stock Exchange should back up its decisions by establishing a "white list" of acceptable accounting firms.

The Institute of Chartered Accountants in England and Wales has now announced that it is to establish a special committee to review investigation and disciplinary procedures. The committee faces a considerable challenge but it must arrive at a rapid decision.

After all, a number of major accounting firms appear to have been found wanting in carrying out their duties. This initiative is long overdue.

RACING BY DOMINIC WIGAN

Fair Season at Lingfield

IAN BALDING and his Kingsclere staff have a high regard for their consistently Silly Season juvenile *Fair Season* and I hope that this good-looking bay will produce his best form to date in to-day's John Sutcliffe Trophy at Lingfield.

Fair Season, who began his career with a highly encouraging third behind the fitter Our Jimmy and Truce of Oman at Newbury in June, has since put up several smart performances.

His most impressive effort probably came in the Prince of Wales' Nursery at Doncaster a fortnight ago. A firm favourite in a field of 15 to defy his formidable weight of 8 st 13 lb, he was caught only in the last 200 yards by the leniently-treated Mrs. McCardy.

The Kingsclere colt, an impressive winner of Newmarket's Exeter Stakes on his previous appearance, when he made all his own running to beat Elusive by three lengths, can regain winning form at the expense of Filipachi, a winner from Cupid's Dew at Sandown on his initial outing.

Two other possible winners for Fair Season's stable are *Silver Shoals*, the almost certain

LINGFIELD
2.00—Hipparion
2.30—Tidal Dance
3.00—Fair Season***
3.30—Roses for the Star
4.00—Ring Rose
4.30—Silver Shoals**
5.00—St. Albans

BEVERLEY
2.45—Bow-Wow
3.15—Misfield
3.45—Valuation*
4.15—Anhydrous

favourite for the Nutfield Stakes, and Swagger, who is also likely to head the market in her race, the Knole Stakes.

Silver Shoals should be good enough to land her event without too much difficulty, but I believe that the Sovereign Path colt, *St. Albans*, who ran with promise at Kempton recently, may prove just too good for Swagger, who has been on the go since the spring.

With backers turning to Bruni for their ante-post bets on the "Arc" in the hope of a smooth success by the Findon grey in to-morrow's Cumberland Lodge Stakes, 9-2 is now generally the best offer. Other prices for Europe's most valuable race are 4-1 Exceller, 5-1 Youth, 6-1 Pawneese and 12-1 Ivanjica and Lagunette.

Eight days after Bruni tries for the £80,000 first prize in the "Arc," another fascinating race is due to take place in the U.S., where three European classic winners, Dahlia, Crow and Empery, are expected to take on some of the best U.S. grass horses in the Man o' War Stakes at Belmont Park.

Dahlia, now in the care of U.S. trainer Charlie Whittingham, was a comfortable winner of the Man o' War two years ago when handled by Empery's trainer, Maurice Zilber.

SALEROOM BY ANTONY THORNCROFT

Irish pictures boom in Dublin

THE GAINS from disposing of works of art in their place of origin were well illustrated by Christie's yesterday on the second day of its house sale at Newtown Park, Blackrock, near Dublin. An American dealer, J. Barry Donahue, paid £16,000, a record price, for a painting by the Irish late Victorian artist Walter H. Osborne. In the London salerooms a work by Osborne rarely exceeds £5,000.

This particular picture, showing a group of people on St. Stephen Green, Dublin, painted in 1895, is very fine, and is going to a private American collector. It was owned by the former Senator, E. A. McGuire, a great patron of Irish art. On Monday his furniture sold for £164,453, and the first session of pictures yesterday added a further £96,577.

Other good prices were the £4,500 from the Irish collector Michael Cadogan for a wooded landscape by Jan Wildens, and £3,200 for a pair of battle scenes by Il Borgognone. The same price was paid for an Irish-school wooded river landscape, and for a rocky landscape in the style of Vinkerboons.

A number of Mr. McGuire's own paintings found buyers. His picture of football players sold for £180, and of the Crucifixion, with a sketch, for £110. Saints' Day in Bergamo went for £100.

At Sotheby's Belgravia English print sale Moulder, a London dealer, paid £3,200 for a set of seven plates by William Blake, illustrations for Dante's Divine Comedy. The set was pulled in 1892, and was in the possession of the Linnell family.

Moulder also gave £900 for 21 plates by Blake to illustrate the Book of Job. The sale totalled £21,343, with only seven lots unsold.

At Bond Street, European ceramics realised £25,120, with a top price of £700 for a part-Meissen dinner service of the late 18th century.

At Sotheby-Parke Bernet in Los Angeles on Monday a session of prints at the start of a print and picture sale brought in £70,742. A New York dealer paid £4,335 for Andy Warhol's ten silkscreens of Marilyn Monroe, signed and numbered, and another dealer bought a Munch lithograph "Löwengruppe," for £2,745.

The good demand these days for carpets was underlined at a Phillips sale where Benasiglio paid £3,000 for a Kirman carpet expected to fetch £2,000. A George III mahogany dining table was on target at £2,000, going to Gordon, and Afton paid £1,250 for a late George III mahogany secretaire bookcase.

Also at Phillips, an auction of lead soldiers totalled £14,514. A set of the Changing of the Guard, consisting of 82 figures which could have been bought before the war for £2, went for £200.

Bemrose plans Caxton stamps link

THE POST OFFICE will be issuing four stamps this year to mark the 500th anniversary of William Caxton setting up his printing press in Westminster.

As the Bemrose Corporation, the Derby printing, packing and publishing group, is also celebrating its 150th anniversary, shareholders will receive the interim results for the first six months of the year in a first day cover enevelope. It will be illustrated by an early print of the original Bemrose offices in Derby and franked with the four Caxton first issue commemorative stamps.

In addition, shareholders will be invited to accept a free copy of the 150th commemorative history of the Bemrose Corporation, written by Dennis Hackett. Employees will also be offered a free copy of the book.

GARDENS TO-DAY BY ROBIN LANE FOX

Bold plans are needed for wide open spaces

NOBODY feels sorry nowadays for men who have more than they want. At least they still exist. But I would like to give space to gardeners embarrassed by a richness of space. Almost every gardener worries from time to time that he has more ground than he can control. Before you cut back to a patch of 20 square feet, remember that you will worry even in the smallest garden if you like gardening at all. The flight from country gardens of more than a quarter of an acre is a fashion as much as a necessity. For if you can steady your nerves, plan boldly and hold to your plan, you will be able, here as anywhere else, to keep a wide area under control. But you must have a clear objective and on no account stray into the employment of gardening contractors, moving agents or full-time gardeners who are only maintaining a garden for your pleasure. Financially, they are death.

No nonsense

An example which has recently come my way may persuade you that this is not mere wishful thinking. It lies in a garden owned by a Monday to Friday man who likes to watch sport on Saturday afternoons and go to sleep after paying the bills on Sundays. The garden has to take second place, and there is no nonsense about self-sufficiency, the flavour of one's own cauliflowers or the carrying of pails of water from the bathroom after the evening whisky and soda. Equally, he likes a nice garden and does sincerely want one. The space to be controlled is almost an acre, much of it a walled garden. This was the despair of the former owners who sold up when they saw £6 a week on the skyline as their full time gardener's pay rise. Like most such gardeners, he knew a lot about green vegetables, a bit about asters and lobelia and most of all about sharpening odds and ends in the tool-shed whenever it looked like rain. So when the £6 a week loomed, he had to go.

The new owner, after a little advice, came to realise the wisdom of my golden rule for large gardens: decide what you like and grow masses of it. Once you stray into mixed borders and one's and two's of this and that, you are asking yourself to manage a task which has different needs at different times. One of the few advantages which gardening has over man-management is that gardeners can actually plan things so that their attention is needed on three or four days, more or less the same days, in each year. There are no holidays, quarrels, marriages or incompetences to disrupt the calendar. If anything is sick, let it die, unless its disease is contagious. If you choose sensibly, you should be spared contagions.

Vegetables were sacked from the walled garden, because they took too much time, even in relation to their present cost. Only the easy spinach, courgette and broccoli were retained, with a space in which broad beans and French beans could be sown if anyone remembered. But this patch was secondary and placed where its years of muddle would not be noticeable. The walls were mostly left bare, because climbing plants would have to be tied on to them. The climbing Hydrangea clings to brickwork by its own aerial roots, so a few were put on the north and east side. Ceanothus were planted against the south wall, above all the hybrid Burkwoodii, to my mind the best value. They were allowed to grow freely as shrubs which happened to back on to a wall. There will be no pruning and training. The Wistaria was actually thrown out, because it had to be clipped twice a year and never flowered remarkably well. It also had to be tied back.

In the centre, he wanted to have roses. Digging his own grave, you might think, he decided to mass them. The last two summers have been dry and free from black-spot. Nevertheless, he avoided all modern teas and floribundas like the plague which most of them are. He ordered 60 bushes each of the great Rugosa roses, the white Blanc Double de Coubert, the purple Roseraie de l'Hay and the pink Sarah van Fleet. The former two, especially, colour to a bold yellow leaf in the autumn and have orange-red hips. Their flowers are born intermittently from June till October. They need no pruning at all. They must not be dead-headed, as that chore robs them of their hips. Fortunately a local nurseryman could offer them on their own roots, a point worth pursuing, if possible with your supplier. So there are no suckers.

Sandy soil

These splendid roses grow in any soil, especially a sandy one or in a seaside garden, despite the wind. Their flowers and, above all, their leaves, are fashionably old-fashioned. I have never known them catch black-spot or any disease which they cannot shake off. They grow four feet or more high, by about four or five feet wide. Sarah van Fleet is more upright in growth than the others. They are, however, well armed with prickles in their lower reaches and must be planted in clean soil unless you wish to chase perennial weeds through a thorn-thicket. Planted five feet apart, they grow into a huge clump, unstaked, for three years. They need no attention.

As they tend to show their base rather obviously, they need a front covering. Advice is never lacking here: perennial Potentilla, Penstemon, Ladies Mantle, Lavender, are names you know well enough. Sure of his aims, their owner chose only the grey-leaved Senecio and the evergreen Rosemary. The former remains the best grey shrub for all gardens, yet it is seldom planted on the grand scale which suits it so well. A hundred were massed in blocks between rosemary which needs no dead-heading, no pruning and no cutting back in the winter, as it is evergreen. The walled garden, I admit, was sheltered from the sharp frost which might otherwise have browned the rosemary's young growth. But the green and the grey go pleasantly together.

Troublesome

Now, the last problem was access. Often, when a bed becomes too much, we talk of grassing it over or just letting it go down to rough grass. I hate mowing, and I think grass is one of the most troublesome burdens in any garden. Of course a piece of lawn was kept up to standard, but the walled area was merely divided by four wide gravel paths. No edging, no mowing, and as long as you water on a weed-killer like Weedex in spring *before* any weeds appear, you will not be bothered with maintenance thereafter.

A bleak design, you may wonder? I have just revisited it and can only say that the limiting of plants to a few varieties gives the place a unity and clear ground plan which is quite charming. They happen to be nice plants, and above all, they were planted in ground clear of all perennial weeds. Otherwise, a year's poisoning and clearing is a wise prelude, if you are starting with somebody else's mess. The one danger is over-ambition. We left the roses, scrunched back down the gravel and before I could say "success" we diverted to the former rubbish heap. "Here", said my man of purpose "I think I will put in a melon pit and see if I cannot grow melons from seed." Even the coolest gardeners do not know when to stop.

TV/Radio

† Indicate programme in black and white

BBC 1

7.05-7.55 a.m. Open University (UHF only). 9.38 For Schools, Colleges. 10.45 You And Me. 11.00 For Schools, Colleges. 12.45 p.m. News. 1.00 Pebble Mill. 1.45 "Bod and the Park." 2.01 For Schools, Colleges. 3.53 Regional News (except London). 3.55 Play School. 4.20 The Wombles. 4.25 Jackanory. 4.40 Speed Buggy. 5.00 John Craven's Newsround. 5.10 Ask Aspel. 5.35 Noah and Nelly in SkylArk.

5.40 News.
5.55 Nationwide.
6.45 "Carry On Jack," starring Bernard Cribbins and Kenneth Williams.
8.10 Softly, Softly: Task Force.
9.00 News.
9.25 The Fall and Rise of Reginald Perrin.
9.55 Sportsnight.
10.55 To-night.
11.35 Weather Regional News.

All Regions as BBC-1 except at the following times:—

Wales—2.18-2.38 p.m. I Ysgolion Cymru. Ffenestri. 5.10-5.35 Tybed? 5.55 Wales To-day. 6.45 Heddiw. 7.10 Fo A Fe. 7.40-8.10 Bellamy's Europe. 11.35 News and Weather for Wales.

Scotland—10.23-10.43 a.m., 2.18-2.38 p.m. and 2.40-3.00 For Schools. 5.55-6.45 Reporting Scotland. 11.35 News and Weather for Scotland.

Northern Ireland — 10.23-10.43 a.m. For Schools. Ulster In Focus. 3.53-3.55 p.m. Northern Ireland News. 5.55-6.45 Scene Around Six. 11.35 News and Weather for Northern Ireland.

England—5.55-6.45 p.m. Look North (from Leeds, Manchester, Newcastle); Midlands To-day (from Birmingham); Look East (from Norwich); Points West (from Bristol); South To-day (from Southampton); Spotlight South-West (from Plymouth).

BBC 2

6.40-7.20 a.m. Open University.
10.35 Nai Zindagi Naya Jeevan.
11.00 Play School.
5.00 p.m. Open University.
7.05 Dressmaker.
7.20 Weather.
7.25 Newsday.
7.40 The Tribal Eye.
8.10 Peter O'Toole in "Rogue Male."
10.40 Arena: Cinema.
11.10 Late News on 2.
11.20 Open Door—Open City.
11.35 Closedown: Angela Down reads "The Seven Sorrows," by Ted Hughes.

LONDON

9.30 a.m. Schools Programmes. 12.00 The Adventures of Rupert Bear. 12.10 p.m. Hickory House. 12.30 Mr. and Mrs. 1.00 News with Leonard Parkin, plus FT index. 1.20 Lunch-time To-day. 1.30 . . . And Mother Makes Five. 2.00 Good Afternoon. †2.25 Wednesday Matinee: "You're Only Young Twice." 3.45 Cartoon Time. 3.50 Emmerdale Farm. 4.20 Runaround. 4.45 Rogue's Rock. 5.15 Cartoon Time. 5.30 Sportscene.

5.45 News.
6.00 To-day.
6.35 Crossroads.
7.00 Don't Ask Me.
7.30 Coronation Street.
8.00 ITV This Is Your Life.
10.00 News.
10.40 The Wednesday Special: The Entertaining Electron.
11.40 World Snooker.
12.10 a.m. Marcus Welby, MD.
12.50 a.m. Close: Judith Davis reads from Kahil Gibran's "The Prophet."

All ITV Regions as London except at the following times:—

ANGLIA

2.00 p.m. Houseparty. 2.25 At Home With Kenneth McKellar. 2.50 The Gamekeeper. 5.15 The Beachcombers. 6.00 About Anglia. 11.55 Police Surgeon. 12.25 a.m. The Big Question.

ATV MIDLANDS

1.20 p.m. ATV Newsdesk. 2.25 The Wednesday Matinee: "Fingers At The Window," starring Lew Ayres. 5.15 Ghost Busters. 6.00 ATV Today. 11.45 Angling Today.

BORDER

†1.20 p.m. Border News. 2.00 Houseparty. 2.25 Sixty Incredible Years. 3.20 Proud Predators. 5.25 The Count of Monte Cristo. 6.00 Border News and Lookaround. 11.30 The Playwright Cecil Taylor. †12.10 a.m. Border News Summary.

CHANNEL

†1.20 p.m. Channel Lunchtime News and What's On Where. 5.15 The Case of the Mukkinese Battle-horn. †6.00 Report at Six. †11.30 News and Weather in French followed by Epilogue.

GRAMPIAN

1.20 p.m. Grampian News Headlines. †2.25 The Wednesday Matinee: "Fingers at the Window," starring Lew Ayres. 5.15 Wait Till Your Father Gets Home. 5.40 Police Newsroom. 6.00 Grampian Today. 10.30 Scottish Focus. 11.40 Angling Today. 12.10 a.m. Evening Prayers.

GRANADA

1.20 p.m. Nature's Window. 2.25 Wednesday Matinee: "Honeymoon with a Stranger" starring Janet Leigh and Rossano Brazzi. 5.10 This Is Your Right. 5.15 Crossroads. 6.00 Granada Reports. 6.30 The Adventurer. 11.40 Late Night Mystery.

HTV

12.00 Flower Stories. 12.30 p.m. Face The Press. 1.20 Report West Headlines. 1.25 Report Wales Headlines. †2.00 "The Story of Esther Costello." †5.15 Chuckleheads. 5.20 Crossroads. 6.00 Report West. 6.15 Report Wales. 6.30 Cilla's World of Comedy. 11.30 So It Goes.

HTV Cymru/Wales—As HTV General Service except: 12.00-12.10 p.m. Chwedlau'r Blodau. 1.20-1.25 Penawdau Newyddion y Dydd. 4.20-4.45 Rhifeddodau. 6.00-6.15 Y Dydd.

HTV West—1.20-1.30 p.m. Report West Headlines. 6.15-6.30 Report West.

SCOTTISH

†1.25 p.m. Road and Weather Report. 2.00 Houseparty. 2.25 Kenny Rogers in New Zealand. 3.20 Sir Harold Wilson in the Scillies. 5.15 Kiri. 5.20 Crossroads. 6.00 Scotland Today. 6.30 Star Maidens. 11.40 Late Call. 11.45 The Big Break.

SOUTHERN

1.20 p.m. Southern News. 2.00 Houseparty. 2.25 "The Garden of Allah" starring Marlene Dietrich and Charles Boyer. 5.15 Sinbad Junior. 5.20 Crossroads. 6.00 Day by Day. 11.40 Southern News Extra.

TYNE TEES

9.25 a.m. Starting Point. 12.10 p.m. I Dream of Jeannie. 1.20 North East News and Lookaround. 2.00 Women Only. 2.25 A Fast Drive in the Country. 3.20 Sir Harold Wilson in the Scillies. 5.15 Star Maidens. 6.00 Northern Life. 11.40 Pro-Am Snooker. 12.10 a.m. Epilogue.

ULSTER

1.20 p.m. Ulster News Headlines followed by Lunchtime. 2.25 Wednesday Matinee: "The Smallest Show on Earth" starring Virginia McKenna, Peter Sellers and Margaret Rutherford. 3.48 Ulster News Headlines. 5.15 Return to Planet of the Apes. 6.00 UTV Reports.

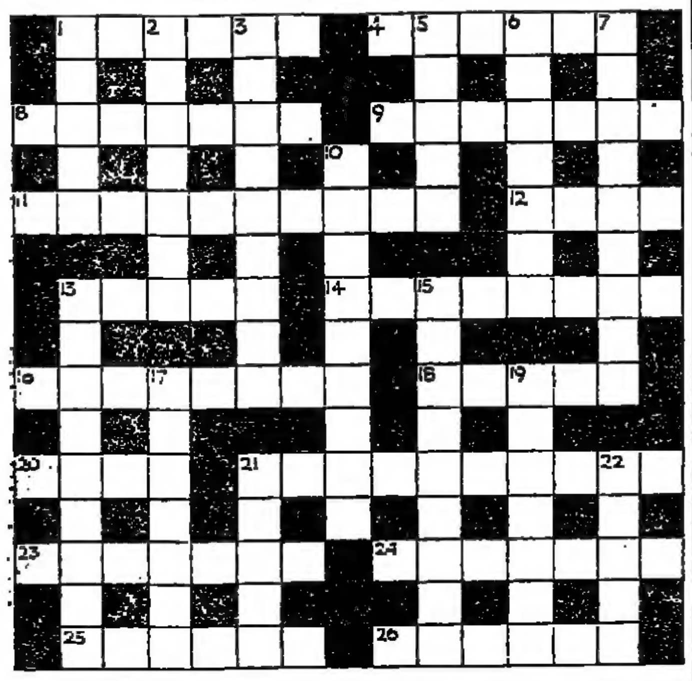
WESTWARD

12.25 p.m. Gus Honeybun's Birthdays. 1.20 Westward News Headlines. 2.25 Wednesday Matinee: "The Couple Takes A Wife" starring Myrna Loy. †5.15 The Case of the Mukkinese Battle-horn. 6.00 Westward Diary. 11.40 Blueprint for Tomorrow. 11.55 Westward Late News. 11.58 Faith for Life.

YORKSHIRE

1.20 p.m. Calendar News. 2.25 Find Volopchi. 5.15 Calendar. 6.00 Calendar (Emley Moor and Belmont editions). 11.40 The Playwright.

F.T. CROSSWORD PUZZLE No. 3,189



ACROSS
1 Death grant (6)
4 Dependant who wants to bring back the rope (6)
8 Hide factory making old coins (7)
9 What makes one fed up to the teeth (7)
11 With no holds barred certainly (2, 3, 5)
12 Student on assistance is put down (4)
13 Sergeant-major everybody calls Tiny (5)
14 Meet to study on border (8)
16 Drunken Edgehill intellectual (8)
18 Read the Scotsman on wine (5)
20 Beginning of second gear satire (4)
21 Easily and repeatedly distant (3, 3, 4)
23 Ban vital part of organ (4, 3)
24 He's on the trail of a southern speaker (7)
25 Harangue from one in business (6)
26 Packer in a hole (6)

DOWN
1 Journal taken by daughter with 1st class return on railway (5)
2 Servant sick over article on stout paper (7)
3 Rock climber reached by secret phone (9)
5 How a girl went wrong (5)
6 Biblical location offers girl individual shelter (7)
7 Arresting motorist driving new car (7, 2)
10 Want a job in ornamentation? (5, 4)
13 Persevere with giving jam to a little bird (5, 2, 2)
15 Proposer who burst into Roman (9)
17 Young Percy kicking a ball about in north London (7)
19 Wreathe a bloke permitted (7)
21 He's a devil if upset over objective (5)
22 Eastern prince appears in morning always (5)

SOLUTION TO PUZZLE No. 3,188

GADGET CRIBBAGE
R I R A A L A
OYSTER VILLAINS
U C N D N D E T
PROROGUE CHANCE
E V W S O E R
REED STAGNATION
R S P R D N
SKYSCRAPER USER
U A N I R O E
RETIRE ASSAILED
P A C M H C V H
LOPSIDED REVERE
U E T A M N A
STRAYING VENTED

RADIO 1 247m

(S) Stereophonic broadcast.

6.00 a.m. As Radio 2. 7.00 Simon Bates. 9.00 Tony Blackburn. 12.00 Paul Burnett including 12.30 p.m. Newsbeat. 2.02 David Hamilton (S) (also on VHF). 4.30 It's D.L.T. OK! 5.45 Newsbeat. 6.02 Sam Costa (S) (joins Radio 2). 11.00 John Peel (S) (also on VHF). 12.00-12.05 a.m. As Radio 2.

RADIO 2 1,500m and VHF

6.00 a.m. News Summary. 6.02 Colin Berry (S) including 6.15 Pause for Thought. 7.02 Terry Wogan (S) including 8.27 Racing Bulletin. 8.45 Pause for Thought. 9.02-11.30 Pete Murray's Open House (S) including 10.30 Waggoners' Walk. 11.30 Jimmy Young (S). 1.30 p.m. Sports Desk. 1.55 Good Listening (VHF). 2.02 David Hamilton (S), as Radio 1, but including on 1,500m. only (also 202m. Scotland) 2.45 and 3.45 Sports Desk. 4.30 Waggoners' Walk. 4.45 Sports Desk. 4.47 Sam Costa (S) including 5.45 Sports Desk. 6.45 Sports Desk. 7.02 The Law Game. 7.30 A-Pickin' and A-Grinnin'. 8.02 Two In Mind (S). 8.30 Sing Something Simple (S). 9.02 Command Performance (S). 10.02 Sports Desk. 10.05 Words and Music (S). 11.02 Jean Challis with The Late Show (1,500m. only, also 202m. Scotland. VHF joins Radio 1). 12.00-12.05 a.m. News.

RADIO 3 464m, Stereo & VHF

‡ Medium Wave only

‡6.55 a.m. Weather. 7.00 News. 7.05 Your Midweek Choice, part 1 (S). 8.00 News. 8.05 Your Midweek Choice, part 2 (S). 9.00 News. 9.05 This Week's Composer: Prokofiev (S). 9.50 Organ Music (S). 10.30 Gabrieli String Quartet (S). 11.25 Debussy and Ravel piano recital (S). 12.05 p.m. Halle Orchestra, part 1: Hamilton, Beethoven (S). 1.00 News. 1.05 Concert, part 2: Balakirev (S). 1.50 The World of Operetta: Franz Lehar's "Autumn Harvest" (S). 2.50 Cello Music (S). 3.45 Scottish Baroque Ensemble (S). 4.30 Songs and Dances of Czechoslovakia (S). 5.00 Choral Evensong. ‡5.45 Homeward Bound. ‡6.05 News. ‡6.10 Homeward Bound (continued). ‡6.30 Lifelines: Language and Communication. 7.30 BBC Scottish Symphony Orchestra (S). 8.50 Scientifically Speaking. 9.35 Beethoven chamber music concert (S). 10.00 The Music of Daniel [illegible]. 11.00 The Arts Worldwide. 11.25-11.30 News.

Radio 3 VHF only: 6.00-7.00 a.m. and 5.45-7.30 p.m. [illegible]

RADIO 4

434m, 330m, 285m and VHF

[illegible] of the Conservative Party. 7.30 Murder International. 8.00 Lifelines in Medicine. 9.00 Quote . . . unquote. 9.30 Kaleidoscope. 9.59 Weather. 10.00 The World Tonight. 10.45 A Book at Bedtime. 11.00 The Financial World Tonight. 11.15 Chalk and Cheese. 11.30 News.

For Schools (VHF only) 9.05 a.m.-12 noon and 2.00-3.00 p.m.

BBC Radio London

206m and 94.9 VHF

6.00 a.m. As Radio 2. 6.30 Susie Barnes with Rush Hour. 9.00 Personal Choice. 9.30 John Toogood with London Live. [illegible]

London Broadcasting

261m and 97.3 VHF

[illegible]

Capital Radio

194m and 95.8 VHF

[illegible]

هكذا من الأمل

evision

Prix Italia by CHRIS DUNKLEY

ogna is the home of etti bolognese, the site of dest university in Europe ccording to many people in ountry, the Italian Com- t Party's show city because unicipal government has under communist control than any other. At any he buses are free if you before 9 a.m., and Bologna did become a commune e beginning of the 11th y (having been a trade in the Iron Age) though y suggests that communist l has remained unchanged then.

ic, nevertheless, that the rix Italia television festival aking place in the city's o dei Congressi had not completed its second day the Russian delegate on ry judging the music pro- nes felt obliged to make otest to the Prix Italia's appointed secretary al, Dr. Alvise Zorza, because at he took to be flippant nent of the Soviet flag in anish entry.

e this was a comedy music amme made by the British , The King's Singers, in precisely the same treat- was dealt out to the h, German and British (they were all stuck in a astle!) the protest seemed he odd. When it was ned that other countries were used to decorate pants these days, and that ffence was intended, the t died away.

vever, the city and the al are continually creating positions and contrasts are at least as odd as that: le in the sunshine the s skitter across the Etrus- emains, and in one of the hes which are many and archaeologists burrow gh whole series of floors, ering evidence of older and vilisations.

ide the beautifuly designed superbly well appointed zzo" delegates, jurors, and aper men from four nents bathe (though some- it is more like water e than a bath) from 9 in norning until 7 at night in eculiar culture which often s to be obsessing mankind e second half of the 20th ry: Broadcasting and, in cular, television.

e air conditioning and the ened viewing rooms ensure we watch the 60 television rammes which are competing rizes in an atmosphere from all suggestions of the old unique light, smell, and atmosphere have been eradicated.

Outside there is an attractive Italian homogeneity, embracing everything from the little groups of soldiers and students who chat the evenings away in the *medieval squares to the dozens of* different kinds of pasta on sale in the shops.

Inside there is an international heterogeneity — also attractive, but in an utterly different way — as broadcasters and critics from Yugoslavia, South Africa, Japan, Canada, Britain and a dozen other countries watch one another's programmes and note from them one another's habits, conventions, and advances in broadcasting during the past year.

In the last few weeks a small but strong movement has developed in Britain pressing for the establishment of an annual television festival of our own, to

The Entertainment Guide is on Page 32

be added to the list of those *already* held in Monte Carlo, Montreux, Cannes, Berlin, Prague, Beunos Aires and goodness knows where else—many of them unimportant—in addition to the Italia which is the oldest, the biggest, and by far the most respected.

The move in Britain was prompted by the success of the inclusion in this year's Edinburgh Festival of a retrospective of the drama programmes of the late James Mactaggart and an *accompanying polemical* lecture on the state of television drama from John McGrath. Both these ideas would stand repetition and developement at future Edinburgh Festivals.

As it happens we are being richly served this year by BBC2's "Festival 40" and by the National Film Theatre's ITV 21 season in October, but such events are very much the exception rather than the rule, and Edinburgh could do a great service to those concerned with the serious consideration of television if it establised regular retrospectives — and for that matter regular polemical addresses from programme makers (rather than remote academic theorists).

But if there is any thought of developing a television festival of the more conventional type at Edinburgh, the organisers would do well to study the Prix Italia first and see what happens when you award prizes for music programmes, for dramas and for documentaries and then invite broadcasting companies to enter their own choices.

So far this year we have seen all 19 of the music entries (Switzerland won the Prix Italia in this category with *Circuit Fermé* and Japan took the RAI prize with *The Whistling Of The Wind*), *11 of the 22 drama* entries, and none of the 19 documentaries. Already it is clear that none of the difficulties which have become familiar in previous years have disappeared.

First—though least important because they are never serious contenders for the prizes—are the companies which insist upon sending programmes looking like promotion films made by their national tourist boards. For example, Mexico's entry in the music category, *El Ballet Folklorico De Amalia Hernandez*, consisted of an hour's videotape recorded unimaginatively in studio showing men with lines of silver buttons down their trousers stamping in circles round their sombreros.

Each year that I have attended the Prix Italia (and this is the third) Spain's entry in this category has featured Antonio-style dancing and 1976 has been *no exception: the castanets* clacked and the heels thudded to Ravel's "Bolero." Such entries set no problems for jurors but they do waste time.

The serious dilemmas arise when programmes run into questions of definition and separation: where do dramatised documentaries end and documentary dramas begin? Should the prizes in the music category be awarded to programmes which advance, or at least fully extend, modern programme-making techniques or to those which contain the best music?

Some people (including the head of BBC television's music and arts programmes, Humphrey Burton) complained that this year's music winner contained completely unremarkable music —a judgment with which I agree. What it did contain was extensive examples of a process called "colour separation overlay" and a lot of other tricky technical effects, some more and some less original, all devoted to a modern ballet with a decidedly banal parable.

That *Circuit Fermé* should win the prize is a reflection of the generally low standard in this class this year, a fact which was emphasised by Francis Coleman of Thames Television who was chairman of the jury. That *The Whistling Of The Wind* should take the prize offered by RAI (Radiotelevisione Italiana) was in my view absurd since this dark, brooding and intense programme contained nothing which sounded, to the conventionally trained Western ear anyway, like music at all.

The BBC entry, *African Sanctus*, which was reviewed here with great enthusiasm when it was first broadcast, seems to *have failed partly* because the character of its moving spirit, David Fanshawe, did not appeal to the jurors, and partly because some considered it more of a documentary than a music programme.

For the rest there was a lot of modern ballet of the writhing-on-the-floor variety, accompanied by electronic "music"; some conventional rebearsal programmes; and—as *a lighthouse of simplicity in a* sea of pretentiousness—*Danny Kaye's Look In At The Metropolitan Opera*, a child's guide to the Met made by CBS.

As we work through the second half of the drama entries it becomes clear that Thames's *The Naked Civil Servant* must have a pretty good chance. Yet if it does win a *prize* it will not be a walkover: in their appallingly titled *Life of The Schizophrenic Poet Alexander Marz*, ZDF of Germany has shown a very cleverly written study of concepts of madness raising more forcefully than ever before on television the question of whether it is those whom society labels insane who are really mad or whether it might be the supposedly sane.

In Eugene McCabe's *Heritage*, which deals starkly with Ireland's troubles, Radio Telefis Eireann have the best television play I have ever seen from them, and one which should (though no doubt won't) be shown all over the U.K. as soon as possible. Denmark has entered a beautifully filmed costume drama of the 18th century, *Diary Of A Parish Clerk*, and even Australia surprised us all with a modern high-rise social drama called *You Don't Clap Losers* which was well above the standards we have become accustomed to.

So although Switzerland made life difficult by showing a studio investigation of *The Martyrdom And Death of Michel Servet* which looked remarkably unlike drama to me, and thus raised again the problem of categorisation. It looks as though an unusually low music standard will be offset by an unusually high level of drama.

Yet if Edinburgh were ever to attempt this sort of festival, they might be well advised not to announce categories at all but simply to award prizes for whatever the jury considered excellent.

Leonard Burt

Michael Hordern and Julie Covington in "Jumpers" which opened last night at the Lyttleton.

Montepulciano Festival—2

Cantiere and competition by ANDREW PORTER

The Zoological Palace was a three-act "opera" (lasting about an hour and a half, without interval) with a libretto by "four London children" translated into Italian by Montepulciano schoolchildren, and designed by them. The score was by Thomas Jahn, the trombonist of "Hinz und Kunst." In Act I, *Watercress Sandwiches*, Willie Winchbucket tames the terrible dragon Tunkinbutton and brings him to court. *Interval* is set back-stage, and shows the characters preparing for Act 3, *The Zoological Palace*, in which the *animals—boa* constrictor, rhinoceros, elephant—brought as substitutes for the princess's missing Peke—escape and take over the palace, while the court goes to live in the zoo. I thought it all rather silly and pointless. Jahn's music was footling. As an exercise, for the children, in collaborative creation it no doubt served a useful purpose. John Venning, from the ENO Chorus, played young *Willie with aplomb*.

In summer I live not far from Montepulciano — three towns down the Val di Chiana—and drove across to attend the *Cantiere* events as a visitor, not a participant. They were enjoyable visits. Just inside the city gate there is a trattoria, discovered by chance years ago, that never lets one down. After climbing the steep streets to the piazza one met there a friendly gang of artists and enthusiasts. The atmosphere is something like Spoleto in the early days, with dashes of Aldeburgh, Wexford and Dartington. The *Cantiere* is planned as more than just a festival—as one way in which artists and citizens can meet and make art together in a socialist community. Montepulciano, of course, is a special case. In the words of an introductory essay in the programme, "There is no longer a court, or feudalism. The songs of the peasants have yielded to the racket of farm machinery [yet one can still encounter white Tuscan oxen on the roads]. Nevertheless, the country remains a fundamental part of the town's life, not just for its products but because it still surrounds this fair hill. All has changed — but Montepulciano remains what it was four centuries ago: its palaces, streets, lanes make up one of the best preserved historical centres, a rarity in this Italy defaced by *speculative building*."

At home, comfortable in a long music-room where once a contadino's beasts were stabled, I sit listening—by way of fine Japanese equipment—to Wagner's anti-Capitalist tetralogy broadcast from Bayreuth or to operas from Salzburg, that most expensive of all festivals. Across the valley a farmer works his fields. Mushroom-gatherers troop by to cull the woods, as for centuries long they have done. I tap these words on an electric typewriter made in U.S.A., and would correct them with a pen fashioned from a quill dropped by a passing porcupine—if only it wrote better. On the way to Montepulciano I pass through the town of Lucignano, where another popular *festa* is in progress—dancing under the trees, to people's music of our day blaring from loudspeakers. At Monte San Savino, there is a Festival of Roast Pig and the town band plays. Henze's aim at Montepulciano is "to give a small example of what cultural life could be or one day might be," a possible first step. Like his *The Bassarids*, like *El Cimarrón* and *Natascha Ungeheuer*, and at Covent Garden *We Come to the River*, the *Continiere* he has organised raises hard—if familiar—questions about the nature and purpose of art, some of them general and others—hinted at in the sentences above—posed specifically by these manifestations in a small Tuscan town.

The theatre was well filled for a Hinz und Kunst recital that included the premières of Richard Blackford's deftly wrought *Concerto for Seven*, with long lyrical solos for the bass clarinet of Niels Frédéric Hoffmann's *Nonno Schulze*, a silly sketch that went on and on; and of Henze's *Amicizia!*, a ten-minute quintet (clarinet, trombone, cello, percussion, piano) its title "referring to the greeting of young anti-fascist and pacificist groups in the two Germanys" and its form a set of episodes spun around Hanns Eisler's *Song of the United Front*. It is a beautiful piece, with a rapturous clarinet solo and an effectively resolute march-finale. There was also *Homage to Kurt Weill*, the collaborative song cycle with instruments played by the London Sinfonietta at last year's Berlin Festival (Jahn, Blackford, Henze, Hoffman among the composers) — unworthy homage, for these songs are epigrams set at best sketchily, sometimes mawkishly, and miss by miles

The piazza gradually emptied and the bar filled up as a guitar competition stretched on and on into the night. The pieces, some of the ink on them still wet, had been written by members of Maxwell Davies's composition course and were played by guitarists from Bream's and Minella's classes. Each entry "represented" one of the town's contradas, but the result was hardly a *palio*. A "popular jury," one from each contrada, did the judging. Paul Schwartz won the first prize and Blackford the second and the pieces I liked best were composed by Brian Howard and Alan Cornwell.

For an event called *Tradimenti*, the classrooms and corridors of a large elementary school were filled with such things as a little old lady talking earnestly to a class of potted geraniums, a girl sitting motionless with dead or drugged turkeys around her feet, a room paved with pizzas in the midst of which someone scraped at a cello. Outside on the lawn, the local popular company played *Pia da' Tolomei*—not Donizetti's opera but a bruscello, a kind of debased grand opera bawled or droned out by amateur singers, to amateur music, accompanied on a *fisarmonica*. The event was designed by Antonello Aglioti and directed by Memè Perlini, both men of some reputation. But, like the pizzas, it seemed half-baked—until, at the top of a staircase, one encountered a talented group of players engaged on a continuous round of Maxwell Davies's *Antichrist*, *Missa super L'Homme armé* and *Scottish Dances*—three very approachable yet uncompromised compositions with qualities of technique and imagination, and inspiration that made the rest of *Tradimenti* seem tawdry, childish, and unthought-out.

No conclusion. I can't see in what direction this "first step" is leading. Next year may show. In several recent compositions Henze has, by the sensitive, shapely posing of questions, created significant works of art. The *Cantiere* he "composed" this year is rough-edged. For the active, performing participants, I have no doubt it was immensely stimulating. How the *poliziani* reacted to it I have no idea. For a visitor it produced some rewarding and some rather dull experiences. But then it was not aimed at big-city visitors.

Leonard Burt

ephine Veasey and Donald McIntyre in 'Das Rheingold' at Covent Garden last night

May Fair

Anna Russell by B. A. YOUNG

It seems a long time since Anna Russell was last here, picking out the more laughable bits of Wagner's libretto of *The Ring* for us fraternal philistines, but as she assures us from beneath a voluminous costume patterned like my bedroom curtains, she has not passed away. She has only been to Australia.

Wagner is still the best weapon in her armoury, but the dissection is a little changed from the last time I heard it, for Miss Russell's voice has descended about an octave, and she is more at home with Alberich and Hagen than with Brunnhilde or the Rhinemaidens. Anyone so devoted to Wagner as not to be able to laugh at—for example—the fact that Gutrune was the only woman Siegfried ever saw who was not his aunt might as well stay away. Myself, I think a lot of what Miss Russell digs out of *The Ring* is pretty funny.

I can't go along so happily with her commentary on Verdi's *Nabucco*, whose ludicrous libretto (not a draught from the finest Solera) is not much more ludicrous than most contemporary operas. Miss Russell has to content herself with finding the music inappropriate to the words. All the same, I congratulate her most heartily on her ability to persuade an audience at the May Fair, of all places, to sing an aria from the opera to a new lyric about Shadrach, Meshach and Abednego which she has fitted to it.

After a dissertation on national anthems to begin the show instead of the Godsave, Miss Russell tells us a good deal about her life, illustrating her account with imitations of herself singing folksongs to the Celtic harp or performing mock French and German songs as she used to in Canada under Sir Ernest MacMillan (Anyone remember Betove?) There is more reminiscence later on, ending in a speech by a lady chairman that comes unfortunately just when Joyce Grenfell's book has reminded us how superbly she did that very thing.

Still, Miss Russell is good company, and there were folk in Monday's audience who were almost hysterical with laughter.

tival Hall

Orchestre de Paris by RONALD CRICHTON

nce's most prestigious hony orchestra began a ife as recently as 1967, but ne goes back to the eminent historic body representing ociété des Concerts du Contoire. The death of their conductor, Charles Munch, atter of months after the concert, was a blow from perhaps the Orchestre de have never entirely reud. At any rate, in spite e successive presence of an and Solti at the helm. n spite of the evidence of dings, they have never captured the continuous nition outside France to the undoubted excellence ir players seemed to entitle

w, soon after their appear- at the Edinburgh Festival, are in London with their conductor, Daniel Barenboim. Monday's concert, the of two on successive even- suggested that they have found a chief who will both inspire and consolidate them. The opening bars of Franck's Symphony, which had the first half to itself, immediately fixed the attention, like a whole choir of fine French singers with that forward production so often missed when other races essay French music, suddenly descending on to the Festival Hall platform.

The Paris strings have an edge, a solemn burnish, quite unlike Berlin silk, Austrian sweetness or the adaptable compromises of the best English orchestras, yet admirably suited to the strong, questioning phrases of Franck's exposition. The wind (in this work) produced an equally individual organ-like texture largely due, it may be, to the superfine quality of French clarinet tone especially in the low register. Trumpets are lambent and well-mannered—their tone is so distinct from the sound of a real French horn that there is no need to bray.

Franck's unique Symphony is beginning to come back after long neglect probably induced by equally long popularity. Tovey, who devoted one of his most idiosyncratic analytical notes to the work, called it "this great model of clarity and breadth." Barenboim's impassioned reading, in which no opportunity for *espressivo* playing was overlooked but where the finale was most adroitly controlled, should have converted scoffers and opened a new experience to those coming fresh to the work. Apart from a certain reluctance to observe soft dynamic markings, conceivably due to unfamiliarity with the hall, the central movement was a delight—and the returns of the cor anglais tune were among the things that made the finale so good.

More usual French territory was covered in the second half, with Debussy's *L'Après-midi d'un faune* and the Second Suite from Ravel's *Daphnis and Chloë* in performances dazzling enough to stifle doubts concerning the wisdom of programming two such famous evocations of idealised Hellas on end. A remarkable feature of the *Faun* was the dryness of much of the playing—dryness not in a pejorative sense but in a complimentary one of total absence of fuzziness or sentimentality. The *flute was expectedly admirable*, the harps exemplary—compare the skeletal arpeggio rustlings near the opening with the quiet but rich resonance towards the end.

The high finish of *Daphnis* was again, predictable. The surprise was the combination of the broad fresco sweep with diamond-sharp detail. For once a connection was established with the later Ravel, with *L'Enfant* and the Concertos. In the first encore, the Minuet from Ravel's *Tombeau de Couperin*, the first oboe covered himself with *gloire*. For the second extra, Barenboim chose *Pomp and Circumstance No. 1*. Never did one expect to hear a French orchestra phrasing "Land of Hope and Glory" as *nobilmente* as if Elgar was in their blood, but it happened. An exciting concert.

Robin Phillips continues at Stratford

Despite rumours circulating earlier this summer, Robin Phillips is to continue as artistic director of the Stratford, Ontario, Festival Theatre. He has signed a five-year contract which will take effect on November 1 this year.

Plans for next year's festival, the 25th, include the return of Maggie Smith, who played Cleopatra and Millamant there this year, and of Brian Bedford. Mr. Phillips is also trying to secure the appearance of leading Canadian actors, who have been pursuing careers elsewhere, whenever possible.

EUROPEAN NEWS

Lisbon denies sending troops to Alentejo

BY PAUL ELLMAN LISBON, Sept. 21.

THE Portuguese Cabinet met to-night to discuss proposed alterations to the controversial Agrarian reform programme.

The meeting took place against the background of official denials that troop reinforcements had been moved into the southern Alentejo region, scene of most expropriations, to head off possibly violent reaction to a decision to return illegally occupied land to former owners.

Nevertheless, contingency plans for the use of troops are known to have been discussed in recent days by the President, General Ramalho Eanes, and senior officers, and the Army chief of staff, Gen. Rocha Vieira, visited Evora, the capital of the Alentejo region, to-day for talks with local military commanders.

Measures which the Government was thought likely to approve to-night included an early return of a number of smaller properties in the Alentejo which have come to symbolise the more glaring abuses of the Agrarian reform programme so far.

A gesture of this sort would be designed to appease the anger of the reform programme's opponents, the Confederation of Portuguese Agriculturists (CAP) which claims to speak for 400,000 private farmers.

Fears that the Communists and far Left might react to such a move with outright defiance leading to violence have sparked a rash of reports of armed groups being formed in the Alentejo to fight against attempts to expel workers from illegally occupied land.

A number of minsters in the minority Socialist Cabinet headed by Dr. Mario Soares are thought to be unhappy at the prospect of being associated with measures which lay their party open to attack from the Left.

But steps to remedy some of the abuses of land reform have come to be seen as a test of the Government's determination to impose its authority, particularly in the wake of Dr. Soares' message to the nation two weeks ago promising tough measures to rescue Portugal from economic collapse.

Fälldin silent on new Swedish government

BY WILLIAM DULLFORCE STOCKHOLM, Sept. 21.

MR. THORBJÖRN FALLDIN, the Centre Party leader who is expected to replace Mr. Olof Palme as Prime Minister following the non-Socialists' victory in Sunday's general election, remained silent and evasive to-day about negotiations with the Liberals and Moderates on the formation of the new Government.

There would be no "interim reports," he told waiting journalists after being closeted for an hour this afternoon with Moderate (Conservative) leader Gösta Bohman.

The Fälldin-Bohman meeting dampened speculation that the Centre Party and Liberals were trying to work out a programme before bringing the Moderates into the talks. The speculation was prompted by Mr. Fälldin's remark yesterday that the "natural starting point" for a government programme would be the co-operation which had developed in opposition between the Centre and Liberals.

Mr. Bohman said that his talks with Mr. Fälldin had been "free and open" and had started with the assumption that as strong a non-Socialist Government as possible had to be formed. Earlier, Mr. Bohman had said that Cabinet posts should be allocated on the basis of the parties' parliamentary strengths (in a 19-member Cabinet this would give the Centre Party nine seats, the Moderates six and the Liberals four). Mr. Fälldin has said that the Government programme would determine who would get which post.

Mr. Lars Westerberg, vice-chairman of the Trade Union Federation (LO), warned that the risk of disturbances on the labour market had increased after the non-Socialists' victory. LO might be forced into action to achieve its demands in the coming central wage negotiations.

The Stockholm Stock Exchange turned sharply downwards to-day after yesterday's burst of elation. The Jacobson and Ponsbach industrial shares index dropped 11.65 points, wiping out the gains made yesterday, and closing over one point lower than on Friday before the election.

John Walker writes: The value in fixed prices of industrial stocks in Sweden rose by 2 per cent. during the second quarter of this year, according to the Central Bureau of Statistics. At the same time, stocks were 13 per cent. greater than at the same time in 1975. Industrial stocks of semi-finished manufactures went up by 4 per cent. during the second quarter of this year and were 13 per cent. higher than a year ago.

Mining and minerals were up by 10 per cent., while stocks of forest industry products rose by 4 per cent. and finished goods were 2 per cent. lower during the second quarter. The input of paper and pulp products went up by 8 per cent.

Bigger growth in Nine's GNP expected

BRUSSELS, Sept. 21.

EXPERTS of the European Economic Community (EEC) Commission now anticipate a higher growth in the community's 1976 overall Gross National Product (GNP) than in June and expect a sharply higher deficit on current account than four months ago.

According to latest, but unpublished, Commission estimates made in September, a real average growth rate of 5 per cent. is now anticipated for 1976. In its mid-year report on the economic situation in the EEC, the Commission anticipated a 4.5 per cent. real GNP growth. In 1975, the real GNP declined by 2.5 per cent. and in 1974, it had risen 2 per cent.

On the overall current account balance, the Commission now anticipates a 1976 deficit of $7.6bn. contrasting with a $4.7bn. deficit anticipated in June. AP-DJ

Optimism as SALT talks reopen

BY DAVID EGLI

GENEVA, Sept. 21.

Soviet and U.S. negotiators resumed Strategic Arms Limitation Talks (SALT) in Geneva yesterday after a two-month summer recess and with guarded hopes that agreement on limiting nuclear delivery vehicles—missiles and bombers—might be reached within a mater of weeks, writes David Egli.

The so-called SALT II negotiations have now stretched over a period of 19 months, stemming from the Vladivostok agreement in November 1974 between U.S. President Gerald Ford and Soviet Party General-Secretary Leonid Brezhnev. They then set up the broad lines for the limitation of each side to 2,400 nuclear delivery vehicles, including up to 1,320 armed with multiple and independently targetted nuclear warheads (MIRVs).

Polish economy

The Politburo of the Polish United Workers' Party meeting here to-day appointed chairmen to head the Commissions which are to look into key economic problems which were announced by First Secretary Mr. Edward Gierek at Mielec on September 3, writes Christopher Bobinski from Warsaw. The appointments indicate no significant personnel changes are envisaged.

Mintoff ceremony

Maltese Premier Mr. Dom Mintoff's new Government will be sworn into a second five-year term by President Sir Anthony Mamo this morning at a brief and simple ceremony at the Presidential Palace in Valletta.

Cyprus election

Mr. Spyros Kyprianou (44) was unanimously elected yesterday as the new President of the House of Representatives—a position which makes him second-ranking to President Makarios in the Greek Cypriot community, writes Our Nicosia Correspondent. A former Foreign Minister of the Republic Mr. Kyprianou pledged to work "to strengthen President Makarios in his difficult task."

Tindemans' call

A call for a clear-cut division of labour between the 18-member Council of Europe and the EEC was made by Mr. Leo Tindemans in Strasbourg yesterday, writes David Buchan. Speaking to the Council's Parliamentary Assembly, which was somewhat piqued at the fact that the Belgian Prime Minister's report earlier this year on the future of the Nine made no reference to any wider European bodies, Mr. Tindemans suggested for the first time that joint agencies be set up between Strasbourg and Brussels.

Enriched uranium

Britain, Holland and West Germany agreed yesterday to expand efforts to obtain enriched uranium by their joint gas centrifuge project, Reuter reports from Bonn. The three countries agreed to put into operation this year gas centrifuge apparatus yielding nearly 59 tonnes of enriched uranium annually at plants at Capenhurst, England, and Almelo, Holland.

E. German marks flood black market

BY LESLIE COLITT BERLIN, Sept. 21.

EAST Germany's mark is being battered on West Berlin's unofficial exchange market for the non-convertible currencies of Comecom countries. The black market rate for the East German mark, which had remained steady for years at one West German D-Mark to about three East German marks, has in recent weeks jumped to four GDR marks. This was the level before the Berlin Wall was built when hundreds of thousands of East Germans exchanged their money each week for D-Mark at the dozens of exchange bureaux that then existed in West Berlin. The official East German exchange for its mark is one GDR Mark to one D-Mark.

The two West Berlin dealers in East German marks and other Communist currencies supply them to banks here, in West Germany and abroad. One of the exchange bureaux is privately owned while the other is a branch of the Deutsche-Verkehrs-Kredit Bank. The exchange offices is somewhat incongruously located inside the West Berlin railway station of the East German run Reichsbahn railway and is wholly owned by the West German Federal Railway. No-one has been able to fathom any connection, but the East Germans on occasion have publicly called on the West German government to close the railway exchange office. They have however never attempted to shut down the exchange bureau in its advantageous location in West Berlin's capital Zoo station, only a few stops on the elevated line from East Berlin.

Ostensibly East German marks, coming into West Berlin and West Germany are supplied by the 1.3m. East German pensioners who are permitted each year to visit West Germany and West Berlin. No figures are given on the amount of GDR Marks they bring over and exchange into D-Marks but estimates range from 10 to 50m. Marks which they bring out illegally. The number of pensioners coming over has not risen much in recent months so that some western officials claim they are not the sole source for the larger volume of East Marks arriving in West Berlin which has depressed the exchange rate.

When asked why the rate for the GDR Marks has slumped so badly in recent weeks an employee of one of the exchange offices replied dryly: "It's not only a lot of old women bringing in worn GDR Bank notes I can tell you."

Although neither of the dealers in Eastern currencies will disclose other sources of supply some bankers here say that an indeterminate amount of GDR Marks is being shoved across the exchange counters by men who were described as being "anything but East German pensioners." The bank notes often look fresh from the press and their bearers are thought to be East European officials unloading East German marks to get badly needed D. Marks.

A manager of one of the exchange bureaux in the heart of West Berlin suggests that while Easterners may well be dumping their own money to obtain scarce D. Marks the fundamental reason for the falling GDR Mark rate is the far larger amount of East Marks currently being carried out by the pensioners. The GDR may also have an interest in having its own currency exported in this way in order to weaken internal purchasing power.

Other Comecon currencies are also traded in West Berlin at black market rates which are exchanged daily with Frankfurt, Vienna and Zurich. The Soviet rouble for example sells at 80 pfennigs 30 cents U.S.) here compared with the official rate of $1.25 to the rouble. One hundred Czechoslovak Crowns are offered in West Berlin at DM 10.75 ($4.30) as against the official rate of 5.80 Crowns to the dollar.

The main customers for the East European currencies are tourists bound for Communist countries. But they take a considerable risk since the importation of Comecon currencies into East Europe is a punishable offence. Demand for GDR marks comes from the 7m. West German and West Berliners who visit East Germany each year. Businessmen and regular travellers to the East however tend to avoid carrying the illegally exchanged money because of the risk.

Bonn's credit to the East 'not excessive'

BY NICHOLAS COLCHESTER BONN, September 21.

PROMPTED BY the emergence of credit to Communist countries as one of the issues in the general election campaign, the West German government's information office to-day produced a summary of West Germany's exposure in this respect. The report shows that Germany's lending to Comecon is in the same proportion to its exports to Comecon as that of all other Western countries.

It also underlines the way both Germany's Comecon debt and Comecon trade expanded sharply last year and how this expansion has been curbed noticeably in 1976.

Excluding East Germany, which is not considered as a foreign country in the German trade statistics, the total debt of Comecon countries to the West is cited as DM80bn. at the end of 1975. West Germany's corresponding gross lending to Comecon at the same moment was DM 18.9bn. and its net lending DM15.7bn. So the government points out that West Germany accounted for about one quarter of the West's gross lending to Comecon and a quarter of the West's exports to the same countries.

The Government claims that Germany's Comecon lending has grown in line with its Comecon trade, which expanded from DM5bn. of exports in 1970 to DM17bn. in 1975. Stressing German industry's interest in this Comecon business the report adds that Comecon accounted for almost one quarter of the exports of medium-sized machine tool companies in 1975, for 12 per cent. of German plant orders and no less than 36 per cent. of orders for steel pipe.

The report says that increasing Comecon exports to West Germany and greater reserve on the part of the Comecon countries in the buying of West German goods is leading to a considerable reduction in the Comecon's trade deficit with Germany in 1976.

In the first seven months this deficit was DM4.1bn., compared with DM5.5bn. for the same period of 1975. The Government quotes a recent GATT estimate that Comecon countries will reduce their trade deficit from $10bn. in 1975 to $6bn. in 1976.

Turning to the German government's involvement in Comecon debt the report says that the public sector was responsible for only four per cent. of Germany's total credit to Comecon (without East Germany) at the end of last year. The Government does, however, guarantee a considerable quantity of the Comecon debt to German exporters. Such guarantees grew in amount from DM3.7bn. in 1970 to DM11.5bn. in 1975. Till now, none of this guarantee has been made use of.

French, U.S. aircraft tie criticised by unions

By Guy de Jonquieres, Common Market Correspondent

BRUSSELS, Sept. 21.

PLANS by Dassault-Breguet and SNIAS of France to co-operate with McDonnell Douglas of the U.S. in the development of a new medium-range airliner were strongly criticised to-day by the European Metalworkers' Federation, which represents 6.5m. workers in the nine EEC countries, Norway and Sweden.

The EMF, whose president is Mr. Hugh Scanlon, head of the Amalgamated Union of Engineering Workers, said that it "deplores" the joint development plan which, it claims, threatens the growth of co-operation within the European aerospace indusry and its future independence from the U.S.

The Federation calls on the Governments of the Nine, the European Commission and Parliament to examine ways of establishing a comprehensive joint programme for Europe's aerospace industry. "Only on these terms can it undertake projects of partnership with American builders," it adds.

Somewhat ironically—in view of Mr. Scanlon's own anti-EEC stance in the past—the diagnosis and prescriptions recommended by the EMF closely resemble those which the European Commission has been urging on member Governments and aerospace companies for some time to little avail.

Release of the Federation statement coincides with a visit to Brussels by Mr. Scanlon, the main purpose of which has been to discuss with EEC Commission officials ways in which the Community might increase its assistance for training facilities for school-leavers.

Mr. Scanlon, who also serves as chairman of the Engineering Training Board said that he had received indication which in Brussels that the European Social Fund might be prepared o consider more flexible criteria for approving applications for training grants.

In particular, he said, there might be some change in the requirement that employers meet half the cost of training schemes assisted by the social fund. This requirement, he said, was a substantial deterren to efforts to persuade private companies to employ and train more staff than they needed for strictly commercial purposes.

While in Brussels, Mr. Scanlon has also been seeing Belgian trades union leaders and British representatives here.

Dutch budget designed to tackle unemployment

BY MICHAEL VAN OS THE HAGUE, Sept. 21.

THE Dutch Government stressed to-day in its budget for 1977 the urgent need to tackle inflation, revive business investments and curb the growth of wage costs, to reduce the level of unemployment and to improve the economic position of the country.

It admitted that, unlike several of Holland's trading partner countries, the Dutch problems are more structural than cyclical.

However, despite the "difficult financial and economic situation" in Holland, the Government stressed that it does not want to let more fundamental social reforms be pushed into the background.

In the budget, so-called relevant expenditure, excluding cyclical measures, rises by Fls.11.8bn. to Fls.83.2bn. (£18bn.) with relevant revenue going up to Fls.74.1bn. (£16.1bn.). The overall state and municipal financing requirement will again be exceptionally high. It is put at just over Fls.13bn., of which about Fls.4bn. will be available to the Government from the advance subscription account.

The financing deficit this year will be "substantially lower" than expected, at about Fls.13bn. Of next year's financing deficit, cyclical measures will account for Fls.3.5bn. and a new reflationary package may be introduced in the autumn if necessary.

To-day's general policy statement by the Government, delivered by Queen Juliana in her speech from the throne, says the aim will be to maintain and create more jobs, while containing inflation. "Only if this succeeds, will it be possible to safeguard collective (social) provisions, with priority for the weakest in society," the statement adds

The Government says it expects to be able to reduce wage rises next year to between 8 and 8.5 per cent. from this year's level of 9 to 9.5 per cent. This will require a great deal of co-operation from the trade unions, who will have to be satisfied with very little improvement in real income in the next few years, in return for which social reforms will be introduced. The Government's aim of further levelling incomes is again central to its policies.

As for prices, it is hoped to reduce the increase in the consumer index to 6.5 per cent. next year, compared to a rise of between 8.5 and 9 per cent. this year.

In its budget memorandum, the Government, which faces general elections in the spring of next year, states that policies are aimed at gradually reducing unemployment from over 200,000 to 150,000 by 1980. This means that within four years, 150,000 to 200,000 additional jobs would have to be created.

Last week the Dutch central bank President, Dr. Jelle Zijlstra, who may be playing an active role in the coming elections, said the levels of inflation and unemployment were still "unacceptably high." He also said he considered the budget financing deficit too high, and that public sector spending should be cut back further than proposed by the Government earlier this year.

The Government says it considers growth of at least 3.75 per cent. necessary for the next few years. A growth of GNP by 4.6 per cent. in 1977 from 3.5 per cent. this year would be necessary for the Government's objectives.

The current account of the Dutch balance of payments will be showing a surplus of about Fls.6bn. in 1977, up some Fls.0.5bn. on 1976. Natural gas is playing a dominant role here, with an increase in its export value rising by Fls.1.5bn.

'Moral' problem for Barre economic plan

BY ROBERT MAUTHNER PARIS, Sept. 21.

THE anti-inflationary package due to be announced to-morrow by M. Raymond Barre, the French Prime Minister, will be as much a political as an economic exercise. The Government will be judged on its success or failure and its prospects at the 1977 municipal elections and the general election the following year will be affected accordingly.

It is for this reason that so much emphasis is being placed here on what are described as the "moral" aspects of the package. Not only will it contain a large number of the usual technical measures, but they have purportedly been designed to achieve a more equitable distribution of the tax burden and to make a start at bridging the large gulf between the rich and the poor.

These are ambitious aims for a country which, in spite of the enormous economic strides which it has made in the last 30 years, has the doubtful distinction of being the OECD member with the biggest gap between high and low incomes.

The social and political criteria which M. Barre has had to take into account have made his task all the more difficult. The left-wing trade unions would not tolerate a full-scale wages freeze, while the employers have been arguing that any attempt to reverse the present policy of freeing industrial prices would nip the country's still fragile economic recovery in the bud.

Though details of the Barre plan have been kept even more secret than is usual in such cases, it is expected that it will hit the employers rather harder than the workers. Some prices are likely to be blocked temporarily and, in this way, the Government hopes to persuade the unions to accept limits to their wage demands. But M. Barre has promised that he will not touch the free-bargaining system between the unions and nationalised organisations.

The major thrust of the plan is expected to be on the tax front. According to informed observers, income tax increases will range from 4 to 8 per cent., with high incomes bearing the biggest burden, company tax will be raised by about 4 per cent. and the price of petrol and spirits will also go up, as will the tax paid by motorists.

In addition, M. Barre is expected to announce urgently needed steps to finance the mounting deficit of the social security system, expected to reach Frs.4bn. (more than £500m.) this year, and as much as Frs.12bn. in 1977. Though supplementary credits are likely to be provided by the Government to finance this year's deficit, longer-term measures are expected to include a rise in social security contributions, the suspension of reimbursements for some 400 pharmaceutical products and, during a second stage, a radical overhaul of the whole social security system.

Rumours were also rife to-day that a special investment pool on the lines of the investment dollar premium system in London would be re-introduced, together with a reinforcement of foreign exchange controls. This caused an immediate weakening of the franc on the exchange markets.

Exchanges in Spain to get more bank help

By Roger Matthews

MADRID, Sept. 21.

SR. LOPEZ de Letona, Governor of the Bank of Spain, has pledged that official support for the stock exchanges in Madrid, Barcelona and Bilbao will be maintained during "the present exceptional circumstances."

The bank has been extremely active in the past few months in propping up share prices, though the Governor is unwilling to disclose how much money has been involved.

Most brokers agree that without this support, the three markets would have continued to slide, possibly at an alarming rate. The Madrid index, having been down more than 20 per cent. on the year, recovered slightly last week and closed to-day at a little more than 18 per cent. off since January 1. Under the Spanish system, the index reverts to a base of 100 at the beginning of each year.

Although agreeing in principle that bank intervention was not advisable, Sr. Lopez de Letona argued that on this occasion it was the right policy. He based his defence on the need to inject liquidity into the system to maintain industrial investment and to protect the interests of the small investor. He also said that the market was now being influenced by factors far removed from normal operations, presumably a reference to the political situation.

The Governor said he believed that the support would be transitory and that confidence could be re-established fairly quickly. However, other Government measures have failed to renew buying interest, and with a fairly long period of economic and political uncertainty assured—at least until after next summer's promised general election—the bank must be prepared to take in more paper.

The newly appointed Sr. Lopez de Letona is rapidly making his presence felt. A former minister closely associated with other ex-ministers, the new Governor is expected to have an important influence on the conduct of economic policy.

● In an effort to reduce tension in the Basque provinces, the Minister of the Interior, Sr. Martin Villa, the Minister of the Interior, has agreed that the *Ikurrina*, the flag of the Basque National Party, will be tolerated but not legalised. Police patrols in working-class districts have also been reduced, though the Minister has promised that illegal demonstrations will be firmly put down.

Italy's political parties confronting crisis of identity

BY ANTHONY ROBINSON ROME, Sept. 21.

AS Italian political life resumes after the brief summer holiday break it is becoming increasingly clear that Italy's political parties are facing an identity crisis as they come to terms with the general election vote of June 20 and the subsequent formation of a minority Christian Democrat government dependent for its survival on the abstention of the Communist Party as well as that of the former partners of the centre left coalition.

The Christian Democrat Party has reacted with a series of conventions aimed at replacing the traditional factional structure with a more articulated arrangement through which the various tendencies present in this inter-class party could express themselves in a more coherent form.

The first of these conventions centred around the efforts of newly elected Senator Umberto Agnelli to create a grouping within the party aspiring to a Giscardian line of technocratic efficiency. This week-end the party's left wing factions met in Saint Vincent in Piedmont in an attempt to underline the peasant and working class popular base of the party and strengthen the position of the present party secretary Benigno Zaccagnini who last April became the first party secretary to be directly elected by the party congress, albeit with a wafer thin majority. But the convention also served to pave the way for the eventual re-entry of former premier Aldo Moro, widely recognised to be one of the party's major strategists. Sig. Moro is tipped to take over the post of party president currently held by Senator Amintore Fanfani who, however, recently became president of the Senate.

The Social Democrats, meanwhile, thoroughly demoralised by their electoral defeat, are searching around both for new leadership and a new identity while the New Socialist Party secretary Bettino Craxi is seeking to strengthen the party's links with the Socialist and Social Democrat parties of northern Europe and ensure greater manoeuvrability for the party both in the trade union movement and between the two majors, the Christian Democrats and the Communist Party.

But the signs are emerging that it is the Communist Party which has taken the greatest risk in consenting to the formation of the new government. It is a decision which the party has been at great pains to explain to its membership both directly in section meetings and indirectly during the thousands of festivals organised by the party newspaper l'Unita every summer in towns and villages throughout the country.

The high point of these local festivals has been the party's two week national festival at Naples, the city whose 41 per cent. vote at the general elections symbolised the party's sweeping gains throughout the Mezzogiorno. Last night Party Secretary Sr. Enrico Berlinguer closed the festival with a speech before an estimated 300,000 strong crowd in which he went out of his way to emphasise both that the party's abstention left it free to pressurise the Government and that the party's flexible tactics did not mean "as some hope and others fear" that the party was on the path towards becoming a social democratic party.

"We are and remain a Communist party," he said, "and that means working for the emancipation of the working class and the creation of a society superior in all ways to bourgeois society." But he added "this new society . . . must be realised in the fullest liberty and democracy, within the principles and rules of the constitution, in the exaltation of autonomy and pluralism and with constant popular participation."

It was a speech which repeated many of the slogans of the party but revealed once again the difficulty of attaching meanings to words and labels in contemporary Italian politics.

The Financial Times, published daily except Sundays and holidays. U.S. subscriptions $167.00 (air freight) $334.00 (air mail) per annum. Second class postage paid at New York, N.Y.

AMERICAN NEWS

Group of 77 plan to set up Third World Bank

BY HUGH O'SHAUGHNESSY MEXICO CITY, Sept. 21.

START on the establishment a Third World Bank and tiatives in the international nking field were among a ckage of ambitious measures reed yesterday evening at the nference on Economic De-lopment among Developing untries here. Nearly 400 dele-tes from 86 countries of the called "Group of 77" develop-g countries, who end their eting here to-day expressed ir intention of setting up a nt banking institution to carry t a full range of commercial erations and similar multi-tional bodies to promote co-eration among themselves on vestment and export promotion tivities.

As well as the creation of new dies, the Conference agreed on ich closer collaboration among eir central banks and other sting financial organisations. This collaboration should embrace the establishment of much more ambitious clearing agreements between states and groups of states and the develop-ment of the idea of a payments union for the group as a whole. In addition, the development banks of the group were told to get into closer contact with a view to subsidising interest rates for projects of special interest. It was also agreed to work for the easier flow of resources among the members of the group.

On trade matters there was agreement on the value of a generalised system of pre-ferences to support the group's own industries. On imports, the group agreed that its policies had to be harmonised not only in regard to imports of goods but also of services and technology from the developed world.

The group also agreed on the need for the establishment of its own multi-national corporations for the marketing of raw materials and on the setting up of commodity exchanges within the group's own territories."

In an interview published with the Mexico City daily El Universal, Sr. Manuel Perez Guerrero, the Venezuelan vice-chairman of the Conference and a leading figure in the North-South dialogue, said that the meeting had been a step towards what he called "our collective confidence in our own resources." But he went on to say that this process did not mean that the developing world was turning in on itself, away from the developed countries. Rather was it, he said, an attempt to promote a new international economic order.

August consumer prices up 0.5%

BY JUREK MARTIN, U.S. EDITOR WASHINGTON, Sept. 21.

AMERICAN CONSUMER prices rose by 0.5 per cent. in August, the same as in the previous two months. Lower prices for meat and poultry were more than offset by increases in the cost of petrol, a wide variety of goods and services, fruit and vegetables.

The figures might be con-sidered unremarkable at any time other than the last two months of a presidential elec-tion campaign. The administra-tion would like to see concrete evidence of a downward trend in consumer prices to convince the electorate that its anti-inflationary policies were work-ing, and had made no bones of the fact that it expected that a fall in the price of meat and poultry would exert suffi-cient influence on the overall index.

Although the Administration has forecast an inflation rate of per cent. for calendar 1976, the cost of living is obstinately continuing to rise by at least a full percentage point above this. Low food and fuel prices did hold the rate of increase down in the first quarter of the year, but the trend in the sum-mer months has been much less encouraging.

President Ford and his economic advisers maintain, with some justification, that they have succeeded in halving the rate of inflation in the two years of his presidency. They have also sought to portray the Democratic Party—and particu-larly the Democratic Congress—as being inherently profligate and thereby incapable of con-trolling inflation.

But there is no doubt that Mr. Ford would have been helped if the figures had been moving more in the right direction in the immediate run up to the election. As it is, the two statis-tics which are most easily under-stood by the voting public, con-sumer prices and unemploy-ment, have started to move up, rather than down.

Nevertheless, Thursday night's televised debate between Presi-dent Ford and Mr. Jimmy Carter, which is to be devoted to economic and domestic policy, may not follow conventional lines. Mr. Carter is nervous of being labelled as a fiscal liberal and has of late been preaching the message that a balanced budget is a desirable goal.

In his interview with Playboy magazine, currently celebrated for his explicit discourse on morality, religion and sex, he explained: "People ask how a peanut farmer from the South who believes in balanced bud-gets and tough management of Government can possibly give the country tax and welfare re-form, or a national health programme or insist on equal rights for blacks and women. Well, I'm going to do those things. . ."

Alaska oil surplus seen by federal agency

By Stewart Fleming NEW YORK, Sept. 21.

THE U.S. Federal Energy Administration to-day forecast that there would be a surplus of Alaskan crude oil of at least 500,000 barrels a day by 1978 when the Trans-Alaskan pipeline is expected to be in full production.

This official confirmation of what has long been rumoured in the oil industry raises a complex network of social and political issues about the pro-duction of oil from Alaska's Prudhoe Bay field in which British Petroleum, through its Standard Oil of Ohio asso-ciate, is one of the largest participants.

The oil surplus will arise in California which, partly because of the slower-than-expected demand for oil in the State, can no longer be expected to either refine or absorb the 1.2m. barrels of oil a day which by 1978 should be coming down the Alasakan pipeline.

Originally, it was intended that the oil would be shipped from the Valdez terminal at the end of the pipeline in Alaska to California where it would be used. Now the oil companies are looking at alternatives which would redistribute the crude to the oil-deprived States of the Mid- and North-West of the U.S.

These plans too are now, how-ever, running into opposition. Mr. Tom Quinn, chairman of California's Air Resources Board and a political ally of Governor Edmund Brown, has written to the Federal Energy Administration protesting about the potential damage to California's environment.

While this falls short of official State opposition to unloading, given the political significance of environmental issues in California and the fact that California itself does not need much of the Alaskan oil, Mr. Quinn's objections cannot be overlooked.

CANADIAN OIL

High stakes in the Arctic

SOME 50 to 60 miles off Canada's Mackenzie Delta in the chill waters of the Beaufort Sea, drill-ing rigs mounted on two ships are boring away into the sea floor. Shrouded in secrecy, the opera-tion is an expensive one. Besides the millions of dollars already spent in preparation, the cost of just drilling each of these two holes is said to be $35m.

Yet the stakes are high. By one estimate, the Beaufort Sea, which laps Alaska's North Slope and Canada's Arctic Islands, holds up to 40bn. barrels of oil and 300,000 bn. cubic feet of natural gas—resources roughly equal to all the oil and gas cur-rently known to exist in the entire North American Continent. Success here, some believe, clearly means more natural gas for the U.S. and an end to Canada's growing oil-supply problem.

Indeed, once again, the world's oilmen are going flat out. Just as they did earlier on the North Slope and in the North Sea. This time, however, the risks may far outweigh the rewards. For in addition to the usual statis-tical odds (seven to one) against any wildcat discovery, the exploration venture under way is taking a chance on both the development of a technology that does not yet exist and the pos-sibility of an environmental dis-aster that would be difficult to control.

Using drill ships in the Arctic's icy waters has never been tried before. A part of these waters, the Beaufort Sea is ice-free only from mid-July to mid-October each year, and even during this period, huge ice floes often break away from the polar ice pack and threaten shipping. The un-predictable movements of this ice, environmentalists say, could prevent a drill ship from plug-ging a leaking well. Worse, they say, the ice could hamper efforts to clean up any oil spill before the sea freezes over again in October.

"An uncontrolled blowout would leak oil and gas under the ice all winter," contends Mr. Herbert Schwarz, a physician and writer who lives in the coastal Eskimo hamlet of Tukto-yaktuk in Canada's North West Territories. "Traditional Eskimo staples like fish, whales and seals could disappear for years. It's just too risky."

On the other hand, Calgary-based Dome Petroleum, the operator of the venture for com-panies that include Hunt Inter-national Petroleum and Gulf Oil Corporation, has been preparing for this summer since 1965. "We are employing the best drilling people and the most up-to-date technology we were able to get our hands on," says Mr. John Gallagher, Dome Chairman. "We think we've reduced the environ-mental risk to zero."

Perhaps. But the Canadian Government, mindful of the dangers presented by the ice floes, has shortened the Beau-fort Sea drilling season by one month. Dome, moreover, has had to post a $50m. bond covering any environmental damage.

The industry at present lacks the know-how needed to produce and transport any fuels extracted from icebound seas. No one is sure, for instance, if an above-water production platform can be built to withstand the crack-ing force of a polar ice pack or if underwater pipelines can somehow be laid to avoid coug-ing the keel of a passing ice island.

Dome and its backers are bet-ting that the answers to these problems will be found in the next decade. That, officials say, is probably the earliest that any Beaufort Sea discoveries could be brought to production any-way.

To the Canadian oil industry, in fact, there is a special impetus to find whatever fossil fuels might exist beneath the Beaufort's floor. Thanks to a continuing decline in oil produc-tion from existing fields, Canada, once an exporter of oil, is now becoming an importer. By 1985, a government study forecasts, the country could have to import some 1.3m. barrels a day, creat-ing a balance-of-payments deficit in Canada's oil account of about $C5.7bn. annually.

Exploratory drilling in other offshore regions of the country have, more often than not, been a disappointment. After nearly seven years of drilling in the Canadian Atlantic, for instance, oilmen have yet to report com-mercial quantities of either oil or gas.

Thus the Beaufort Sea, once shunned by many in the industry as too impractical a site for ex-ploration, is fast becoming one of Canada's last hopes for new supplies of conventional energy. Imperial Oil, the Canadian unit of Exxon Corporation, has made several discoveries drilled from man-made islands in the shal-lower waters of the sea, but Mr. Douglas Baldwin, an Imperial manager, concedes that "we are still looking for a major discovery find."

Dome and its partners went farther out into the Beaufort chasing what geologists say are ever-thickening sediments [illegible] the deeper waters, resembling those found in the prolific oil and gas fields of Louisiana and Texas.

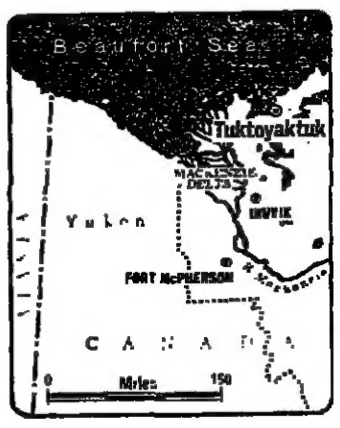
William Richards, Dome's president, calculates that to make any discovery [illegible] while, the group must find at least 1,000bn. cubic feet of gas reserves or 200 to 300m. barrels of oil reserves.

For the attempt, the company assembled a [illegible] fleet at a cost of about $200m. The two drill ships [illegible] $50m. in modifications [illegible] given them added [illegible] and an extra skin of [illegible] steel plate. To guard against ice floes and oil spills, [illegible] added a variety of [illegible] equipment including [illegible] like tubes that [illegible] to deflect ice, and [illegible] devices that can [illegible] approach of ice or close off a well if a blowout threatens.

This flotilla left British Columbia in late June [illegible] because of ice around Point Barrow, Alaska, did not arrive [illegible] the two drilling sites [illegible] August 6.

Since then, the [illegible] been drilling. The two wells [illegible] in 96 feet of water and the other in 194 feet, around [illegible].

As it turns out, however, there is a possibility that even [illegible] and its partners will not know if their gamble has paid off until next summer. Right now, it is believed, each well has been drilled to a depth of slightly over 4,000 feet. But the target is 12,000 feet—more drilling than can be done before the Beaufort once again begins to freeze.



THE Dome Petroleum-Canmar consortium has confirmed it has found gas in the Tingmiark drillhole in 90 feet of water in the Beaufort Sea 60 miles north of Tuktoyaktuk, the port at the north east tip of the Mackenzie Delta.

Dome is using the Canmar Explorer I drillship and the gas show came from 9,800 feet. Dome officials in Calgary des-cribed the show as "sweet wet gas" and said it was encourag-ing. They denied early reports of a blow-out.

The company now intends to close off the hole by next Sunday and then to make a full evaluation. The Explorer III is working on the Tingmiark hole in 90 feet of water 60 miles north of Tuk, but must halt work by Sunday, the end of the drilling-permit period.

Ford donations inquiry

BY OUR OWN CORRESPONDENT WASHINGTON, Sept. 21

TWO ITEMS which vaguely impugn President Ford's prop-erty while a Congressman have surfaced in Washington to-day. It is unlikely that either will become a major issue in the last weeks of the Presidential cam-paign, but their dissemination in the American Press means that they will, at least, be noted.

The Wall Street Journal

The U.S. Presidential Election

reported to-day that the Water-gate special prosecutor is investigating political contribu-tions that may involve Mr. Ford's congressional campaigns in the past in the state of Michigan. The inquiry is centring on dona-tions made by two maritime unions known to have supported Congressman Ford.

Union officials have been sub-poenaed to produce documents and records dating back to 1964. The White House has properly noted that an exhaustive search into Mr. Ford's background was conducted in 1973 when he was nominated to become Vice-President and that nothing was found against him. The Justice Department expressed surprise that the Watergate special prosecutor should be looking into this affair.

The other incident centres on whether or not Congressman Ford was entertained to free golfing weekends, courtesy of U.S. Steel, the nation's largest steel company. Mr Jack Andersen, the well-known columnist, reported on a television show this morning that Mr. William Whyte, then chief Washington lobbyist for the com-pany and a close friend of Mr. Ford, had disclosed that he had treated Mr. Ford to such week-ends on a number of occasions in the 1960s and early 1970s, and had been reimbursed for his expense by his company.

In an interview with an American wire service, Mr. Whyte essentially confirmed Mr. Andersen's story: U.S. Steel had paid "room and board" at the company's country club lodge in New Jersey on at least two occasions, but not since Mr. Ford was either Vice-President or chief executive. The White House said to-day that Mr. Ford had played golf with Mr. Whyte at the resort twice since 1964, once in that year and once "about five years ago."

Twelve years ago there was no law or congressional code barr-ing Congressmen from receiving gifts from lobbyists, but in 1968 the House did adopt a code of ethics counselling against the practice.

Carter campaigns Truman-style

BY PETER RIDDELL MANSFIELD, Ohio, Sept. 21.

THE TWO-DAY Democratic whistle-stop tour through five of the most tightly-fought and crucial large states in the presi-dential election rolled on to-day from Pittsburgh to Chicago, with Senator Walter Mondale, the vice-presidential candidate, making his main theme an appeal "to put a people's Presi-dent in the White House."

Both Senator Mondale and Mr. Jimmy Carter, on the first day of the trip from New York, have concentrated on this populist appeal, while stressing their con-tinuity with past Democratic leadership and seeking tradi-tional support among the unions and ethnic groups.

They have linked these themes with frequent references to former President Truman and his similar train journey in his successful campaign of 1948.

Some of the contradictions in the Carter appeal showed through, however. Immediately after Mr. Carter's wife Rosalynn, had questioned the ability of anyone who had spent his life in Washington to know what it was like to earn a living, there fol-lowed a speech from Mr. Mon-dale, who has worked in the capital as a Senator for the past 12 years.

Both men have attracted a warm rather than enthusiastic response from crowds averaging between 1,000 and 2,000.

The major exception was in Pittsburg, where a crowd of several thousand gave them a noisy welcome.

Troops in Panama siege

PANAMA CITY, Sept. 21.

HUNDREDS OF troops to-day besieged the closed-down University of Panama but took no immediate action to oust student demonstrators who took refuge there after anti-riot police broke up a protest march yester-day.

The 300 students, most of them from a Trotskyite group, refused to obey an order to leave the campus peacefully. Their demonstrations against food price increases was dispersed yesterday by police using rubber truncheons and teargas, eye-witnesses said.

There was no official word on casualties. The eyewitnesses said at least 50 students were arrested during the clashes, which followed rioting here last week.

The wave of unrest, beginning with a student march on September 10 and spreading to working class districts, was the worst since Brigadier-General Omar Torrijos, the head of Government, came to power in Panama in a military coup in 1968.

Sr. Eligio Salas, rector of the 23,000-student university, said the institution will remain closed for an indefinite period because a "reduced group" of students was upsetting public order. It was the first closing in eight years.

The last time the university was closed was shortly after Gen. Torrijos took power. Student demonstrations also prompted that closing.

The protests have not been directed at the canal, even though the U.S. presence in the 50-mile long zone remains a tender point between the two nations. Negotiations for a new canal treaty are underway. Agencies

SEC charges former Chase executive

The Securities and Exchange Commission has charged a former vice-president of the Chase Man-hattan Bank with knowingly overstating by $6m. the net income of securities handled by the bank, Reuter reports from New York.

The SEC charged that as a result of the overstatement, the bank filed false and misleading quarterly reports for the three and six-month periods ended March 31, 1974, and June 30, 1974, respectively.

The former bank officer, Mr. Hilliard Farber, consented to a permanent injunction barring him from further violations of the SEC Act.

$220m. Army error

The U.S. army said yesterday that it had spent a total of $220m. in mistaken weapons purchases and blamed it on sloppy book-keeping, Reuter reports from Washington. The equipment was bought in the early 1970s on behalf of South Vietnam and other countries but they had never ordered it. Last April the Army announced that it had mistakenly spent $165m. on these purchases, mostly of electronic gear.

Banking Bills

In an unusual action, the U.S. Senate has killed three banking bills that had been routinely scheduled for floor passage, AP-DJ reports from Washing-ton. One of the Bills would have allowed federal state and local governments to collect interest on their official bank deposits. Another would have required separate Senate con-firmation for the chairman of the Federal Reserve Board.

IAEA conference

The 20th general conference of the International Atomic Energy Agency opened yesterday with representation from 109 member nations, UPI reports from Rio de Janeiro. More than 1,000 delegates arrive to attend the international organisation's meeting, only the third to be held outside its Vienna headquarters in 20 years.

Solar power plan

Nine groups of utilities and Governmental units have proposed sites for the first solar-electricity power plant in U.S., AP-DJ reports from Washington. The site pro-posals were made to the U.S. Energy Research and Development Administration (ERDA), which solicited requests in July. ERDA plans to begin building a 10,000-kilowatt plant in 1978 that will generate electric power from steam produced by concentrated heat from the sun.

Suspects released

All three suspects in an alleged plot to assassinate Sen. Edward Kennedy, have been released on personal recognisance pending a trial on September 30, UPI reports from Springfield,

Anti-trust fine cut

A judge in Chicago reduced the $50,000 maximum fines he had imposed earlier upon 13 paper-board box makers. They are among 22 such concerns that pleaded no-contest in July to federal anti-trust conspiracy charges in one of the Govern-ment's biggest price-fixing cases ever, AP-DJ reports from Chicago.

OVERSEAS NEWS

Egypt and Libya bid to patch up quarrel

CAIRO, Sept. 21

EGYPT AND Libya are negotiating through diplomatic channels to heal their three-year-old political rift, Libya's top diplomat in Cairo said to-day.

"We are optimistic about an improvement in relations between the two countries in the near future," Mr. Abdel-Kader Ghoka, director of the Libyan Relations Office (embassy) told UPI.

Asked whether the current dialogue would lead to a meeting between Libyan leader Col. Muammar Khedaffi and Egyptian President Anwar Sadat, Mr. Ghoka said: "Such a meeting is not impossible. The two leaders are brothers who head two sister countries. We hope a meeting will materialise."

He spoke immediately after conferring with Egyptian Foreign Minister Ismail Fahmi at the latter's request. He said consultations between him and Egyptian officials have been going on for some time.

Following a bomb explosion aboard a train in Alexandria last month and an official claim that Libya was responsible, President Sadat said the Libyan leader "will not escape from my hands."

But King Khaled of Saudi Arabia, apparently aware of the current bid for an Egyptian-Libyan reconciliation, expressed confidence in an interview to-day that common bonds of religion and language between the two countries will lead to re-approachment.

He cited as a hopeful sign Col. Khedaffi's remarks carried recently by a Cairo weekly magazine describing President Sadat as "my father and he has the right to do whatever he likes with me."

The Libyan leader also said then all he wanted in order to mend fences with President Sadat was a meeting with him "for not more than five hours." But he laid one condition for a reconciliation—the extradition of Major Omar el Meheishi, a dissident member of the ruling Libyan Revolution Council who fell out with Col. Kheddaffi and has been a political refugee in Egypt since last February. Egyptian officials said extradition was out of the question.
UPI

Clashes on all Lebanese fronts

BEIRUT, Sept. 21.

ALL MAJOR fronts in Lebanon's civil war were reported ablaze early to-day amid growing doubt that the inauguration of a new president on Thursday will bring real change to the battered nation.

According to radio stations supporting both sides in the 17-month-old war, Syrian-backed rightists and forces of the leftist-Palestinian alliance hammered each other with everything in their arsenals.

The reports spoke of ground fighting—in some areas supported by tanks—and artillery exchanges in the mountains east and south-east of Beirut, around the vital northern port of Tripoli, and along the confrontation line dividing the capital.

Fierce overnight clashes were reported in the area near the Beirut museum, once considered a possible site for president-elect Elias Sarkis to take the oath of office on Thursday.

He succeeds right-wing president Suleiman Franjieh, who has stubbornly refused to step down before the end of his term although Mr. Sarkis was chosen to succeed him more than four months ago.

The museum fighting earlier gave rise to fears that Mr. Sarkis's inauguration might bring a repetition of the scenes which made his election one of the most unusual in recent history.

On that occasion a hail of shells crashed into the area as deputies accompanied by bodyguards arrived at a villa near the museum to cast their votes.

Lebanon's belligerents stepped up fighting following the failure of talks last Sunday between Mr. Sarkis, Palestinian command chief Yassir Arafat and Syrian deputy defence minister Naji Janji at the eastern Lebanese town of Shtoura.
Reuter

Mr. Sarkis to be sworn in at Syrian-held Shtoura

BY IHSAN HIJAZI

BEIRUT, Sept. 21.

THE Lebanese Speaker, Mr. Kamel al Assaad, has called the country's 99-member unicameral parliament to a meeting in the town of Shtoura in East Lebanon on Thursday for the inauguration of Mr. Elias Sarkis as the new President of the Republic.

Mr. al Assaad's decision came after a French jurist, M. George Vedel, advised the authorities here that a study of the Lebanese constitution showed that the House can meet outside Beirut.

The choice of Shtoura was because the Museum area where the temporary headquarters of Parliament is located has been the scene of heavy fighting in the past few days. It was in that area, where the dividing line between Beirut's Moslem and Christian quarters lies, that Mr. Sarkis was elected last May to succeed outgoing President Suleiman Franjieh, whose six-year term in office expires at midnight on Wednesday.

Shtoura lies in the Syrian-controlled Bekaa Valley. It is there that the bulk of Syrian troops are stationed. Therefore, the Lebanese legislature on Thursday will be under the protection of Syrian forces.

[In an interview with Reuter, Mr. Kamal Jumblatt, who heads the loose left-wing alliance, said the planned parliamentary session was unconstitutional and he would not attend it. The road to Shtoura was unsafe. "The venue lies in occupied territory and I cannot go there."]

Foreign diplomats and journalists who arrived here via Damascus during the past 24 hours said the Syrians were preparing for a major offensive in Lebanon.

The news has been substantiated by the presence in Damascus of a high-ranking Soviet official, Mr Vladimir Vinogradov, whose formal title is co-chairman of the Geneva Conference on the Middle East.

Damascus radio said the talks Mr. Vinogradov has held with Mr. Abdel Halim Khaddam, the Syrian vice-premier and foreign minister, centred on the reconvening of the Geneva conference. However, reliable East European sources here emphasised that Mr. Vinogradov had been sent by the Soviet leadership to deter Syria from undertaking a military initiative in Lebanon. His mission, they added, is to back up a message which Mr. Leonid Brezhnev, the Soviet Communist party leader, sent to President Hafex al Assad five days ago urging him to withdraw his forces from Lebanon.

According to the East European sources, Moscow had received information to the effect that Syria deliberately adopted an inflexible stand at the tripartite conference on Sunday at Shtoura to set the stage for carrying out a military operation which will tame the Palestinian guerilla movement and its *Lebanese Left-wing allies.*

The meeting, in which Mr. Sarkis, guerilla leader Yasir Arafat and Syrian Deputy Defence Minister Air Vice-Marshal Naji Jamil participated, broke down.

Moscow's information, the sources said, is that the Syrian offensive will take place two weeks after Mr. Sarkis takes over as president. The 14-day grace period is intended to have Mr. Sarkis go through the motions of holding a dialogue, which Damascus predicts will be futile. Then Syria can justify its military operation by accusing the Palestinians and the Left-wing alliance of refusing all offered political solutions.

Reuter adds from Cairo: There are strong prospects for an Arab mini summit on Lebanon before next month's scheduled full session, Sheikh Hassan Khaled, the Mufti of Lebanon, said here to-day.

Israel breaks up demos

JERUSALEM, Sept. 21.

SECURITY FORCES dispersed crowds of Arab teenagers and removed roadblocks on the West Bank of Jordan to-day during the seventh day of anti-Israeli unrest in the occupied Jordanian territory.

In Hebron, security forces moved in to break up dozens of Arab youths who tried to block a group of Jewish teenagers en route to prayers at the abandoned Hadassah synagogue in the heart of the city. Witnesses said members of the Jewish group fired warning shots in the air but no one was hurt.

Meanwhile, rebuffing a verbal onslaught from the opposition, Prime Minister Yitzhak Rabin's Government to-day rejected a call for the replacement of Foreign Minister Yigal Allon for proposing extensive territorial concessions to the Arabs in a final Middle East settlement.
UPI

Pretoria claims 200 mile limit

By John Stewart

CAPE TOWN, Sept. 21.

SOUTH Africa is about to declare an "exclusive economic zone" (EEZ) of 200 miles off its coast from the Orange River mouth in the west to Ponto d'Oro in the east. Economic affairs Minister Mr. Chris Heunis will make the announcement within a few days, it is reliably understood.

The announcement will make no reference to two potentially vexed matters—South West Africa (Namibia) and the rights and claims of the three land-locked BSL (Botswana, Swaziland and Lesotho) the countries in the EEZ. It is expected, however, that the Namibia problem will resolve itself in the course of next year when the proposed interim government will declare an EEZ of its own and ask South Africa to help police it. The question of the BSL countries will be resolved through a bilateral or multi-lateral treaty.

Legislation giving effect to South Africa's EEZ is being prepared and will be introduced in Parliament early next year. Indications are that South Africa will enforce its 200-mile sovereignty of the sea with uncompromising firmness. Mr. Heunis' announcement will make it clear that South Africa as a major coastal state, will henceforth make regulations determining exploitation of the fishing grounds after a period of negotiation with fishing nations which currently share the grounds with the republic.

South Africa's position will be explained to foreign fishing nations exploiting the south-east Atlantic grounds at a meeting of the International Convention for South-east Atlantic Fisheries (ICSEAF) in Malaga, Spain, in December. The nations which have ratified the ICSEAF convention are Japan, South Africa, Portugal, USSR, Spain, Bulgaria, Poland, France, Belgium, East Germany, Cuba, Italy, Israel and South Korea. West Germany and Angola will probably join.

Although South Africa will make it clear that it will be the sole authority in respect of its exclusive zone, it has no intention of leaving ICSEAF, membership of which is regarded as important because of beneficial spin offs from joint research and as a point of international contact.

● Australia may grant foreign fishermen access to fish within a proposed 200-mile fishing and resources zone, Primary Industry Minister Ian Sinclair said to-day in Melbourne, AP-DJ reports from Melbourne.

Dr. Henry Kissinger and President Nyerere share a laugh during talks at the State House, Dar es Salaam, during which the U.S. Secretary of State briefed the Tanzanian leader on his discussion with Rhodesian Prime Minister Ian Smith. See Back Page.

South Africa plan to study changes in parliament system

PORT ELIZABETH, Sept. 21

DEFENCE MINISTER Pieter Botha said to-night that a special Cabinet committee had been appointed to investigate possible changes in South Africa's parliamentary system.

He said the British system of Parliament had not worked anywhere else in Africa and that South Africa needed "a unique solution for a unique situation."

The Defence Minister said he foresaw the formation of a canton system where white and coloured bodies would control matters in their respective areas. It was not necessary to follow slavishly the Westminster system, he added.

Mr. Botha, opening the Cape Province congress of the ruling National Party, said his announcement of the committee had been made with the approval of Prime Minister John Vorster.

Political observers said the speech appeared to indicate the Government was hardening its policy of giving coloureds more say in the running of the country. Mr. Botha made no mention of South Africa's black majority.
Reuter

Graham Hatton writes from Johannesburg: South Africa's import bill fell dramatically last month, confirming views that the recession is deepening. August's fall was partly a compensation for the flood of imports in July ahead of the imposition of an import deposit scheme in August, but even so total imports for the past three months are well down in volume terms compared with a year earlier.

This can be inferred from the value figures, which are barely 15 per cent. higher than a year ago, despite last September's 18 per cent devaluation of the rand and despite continuing inflation in the economics of South Africa's trading partners.

Cuba troops 'pull out'

DAR ES SALAAM, Sept. 21.

CUBA is believed to have withdrawn 3,000 of its soldiers from Angola in recent weeks, a U.S. official said to-day.

The official, travelling in the party of U.S. Secretary of State Henry Kissinger, said several shiploads of Cuban soldiers had been seen leaving Angola several weeks ago.

But he said Cuba still had more than 10,000 troops in Angola, and added that the U.S. was unwilling to credit Cuba as yet with carrying out the withdrawal that Premier Fidel Castro promised in a letter to Swedish Premier Mr. Olof Palme last May.

Cuba is believed to have sent more than 15,000 soldiers to Angola.
Reuter

Rhodesian forces kill 15 more guerillas

By Our Own Correspondent

SALISBURY, Sept. 21

RHODESIAN SECURITY force headquarters announced to-day that 15 guerillas and 11 Africans "running with, and actively assisting" guerilla gangs have been killed since the last communique on September 18. Five curfew breakers have also been killed and quantities of war material seized.

Guerillas have "wantonly murdered" six Africans, and two African men and a woman were killed when their vehicle detonated a landmine.

Since December, 1972, 2,229 people have died in the war, including 170 security force members and 1,309 guerillas. So far this month, 154 guerillas and 14 security force members have died.

Meanwhile, the Roman Catholic Bishop of Umtali, the Rt. Rev. Donal Lamont (55) pleaded guilty to-day in Umtali Regional Magistrates Court to four charges under Rhodesia's Law and Order (Maintenance) Act.

He is charged on two counts of failing to report the presence of guerillas at Avila Mission, near the Mozambique border, and two counts of inciting others to commit the same offence. Each count carries a maximum penalty of 15 years jail.

About 70 people of all races packed the tiny courtroom, while another 100 waited outside and peered through the open doorway. Observers for Amnesty International and the International Commission of Jurists were in court, together with four other Roman Catholic Bishops and the former Rhodesian Premier, Mr. Garfield Todd.

An agreed statement of facts submitted to the court said that in April a sister at Avila Mission was handed a letter by an African which came from guerillas who requested medical supplies.

Later that day Bishop Lamont arrived and instructed the sister not to report the incident, and said that he would take full responsibility. The next day four armed guerillas collected the supplies.

On a subsequent visit, the guerillas threatened the sister and the head of the mission, and on April 24 all the mission staff left for Salisbury.

In June when the sister returned to Avila Mission, two guerillas armed with rifles demanded various supplies and these were handed over. The next day, Bishop Lamont visited the mission, but neither he nor the mission staff made any report

OVERSEAS NEWS

Philippines Council opened by Marcos

MANILA, Sept. 21.

[PR]ESIDENT Ferdinand Marcos [to]day celebrated the fourth [an]niversary of martial law in the [Ph]ilippines by opening a new [leg]islative advisory council which [he] said would be the beginning [of] a parliamentary system in the [cou]ntry.

He told a closely-guarded [co]uncil session that in creating [the] group, which includes his [wi]fe Imelda, Governor of Manila, [he] was following the wishes of [the] people.

But, he added, he was by no [me]ans abdicating his own power [to] make laws by degree. From [no]w on, though, he would [ex]ercise his own law-making [au]thority only if he felt the [co]uncil was unable to act.

Members of the council, who [a]re appointed and can be dis[mi]ssed by President Marcos, also [in]clude cabinet ministers, regional representatives and local government officials.

The council session followed formal announcement that a referendum would be held next month on whether martial law should be extended or replaced by parliamentary government, and on constitutional amendments.

President Marcos said that since introduction of martial law in 1972 the Philippines "New Society" had coped with communist insurgency, reduced a moslem secessionist rebellion and cut down crime and anarchy.

Attacking the previous electoral and governmental system as corrupt and inefficient, President Marcos declared: "From 1972 until the end of 1975 we achieved in those three years more than we achieved the previous 30 years."

Reuter

Thailand will ask Thanom to leave

THE THAI Government said yesterday that it will ask former Prime Minister Thanom Kittikachorn to leave the country to head off growing student unrest over his return from exile. The former military strong man, ousted from power in a 1973 student-led uprising, returned to Thailand from exile in Singapore on Sunday and immediately entered the Buddhist monkhood, UPI reports from Bangkok.

A spokesman for the government of Prime Minister Seni Pramoj, which held a cabinet meeting yesterday, said a committee would be appointed to negotiate with Thanom for his departure. The National Student Centre of Thailand, which claims a membership of 100,000, said Thanom's presence is a threat to Thailand's peace and demanded that the Government take swift action to prevent mass demonstrations.

Bangladesh politics move

DACCA, Sept. 21.

[TH]E Bangladesh Government [ha]s allowed two political parties [to] become organised in its pro[gra]mme to restore political [ac]tivity and hold general elec[tio]ns next February.

A ban on political parties was [lift]ed last month but they need [cle]arance from the Government [be]fore being allowed to operate.

Clearance was given for the [Ba]ngladesh Jativa League, spon[so]red by Ataur Rahman Khan, chief minister of former East [Pa]kistan and known for Rightist [vie]ws.

Also approved was the [Na]tional Awami Party, a left-[of-]centre grouping headed by [..]-year-old Moulana Abdul [Ha]mid Khan Bhashani.

Two other parties have been asked to furnish further details pending their approval.

The left-of-centre Peoples League is led by Dr. Alim al-Razee, a former parliamentarian, and the Moslem League is led by Khan Abdus Sabur, one-time senior minister in the Pakistan Government who holds Rightist views.

The Government news agency said 45 groups have applied for clearance. Seventeen were told they had produced incomplete applications and 24 were told they would receive replies shortly.

Reuter

Pakistanis died on voyage to UAE

SIXTEEN Pakistanis drowned and others died of hunger, thirst and overcrowding on a three-day horror voyage in two packed ferryboats carrying 1,150 illegal immigrants to the United Arab Emirates, police sources said in Abu Dhabi yesterday, Reuter reports.

The bodies of 30 Pakistanis who died in the mass attempt to land would-be immigrants on a lonely beach were buried in the emirate of Fujairah on the Gulf of Oman, the sources said. The captains of the two ferries ordered those still on board to jump into the sea when a police patrol surprised the boats unloading men, women, children and old people on to the beach in the pre-dawn hours. More than 600 Pakistanis were arrested and police said they were still hunting scores of others who escaped into the hills above the landing beach, a search was also going on for more bodies. Those arrested will be deported.

Japan examines MiG

U.S. and Japanese experts examining the super-secret MiG25 flown to Northern Japan from Siberia by a defecting Soviet pilot may learn a lot about Russian weapons systems, a U.S. military source said on Tuesday, according to UPI in Tokyo.

The source said the experts now dismantling the aircraft at Hakodate Airport, 500 miles north of Tokyo, will seek to learn how sophisticated the computing of the aircraft's weapons aiming, radar and electronic countermeasures systems are.

"I'm sure the Japanese will be looking at that aspect of the plane and it is a question that we would be interested in," the source said.

Bass Strait drilling

Broken Hill Proprietary (BHP) and Esso Exploration and Production Australia expect to resume drilling in the Bass Strait towards the end of the year, when at least two wheels will be drilled, BHP chairman Sir Ian McLennan said in Melbourne, Reuter reports.

In the longer term, liquefied natural gas exports from the north-west shelf should offset the dimmishing returns from the Esso-BHP Bass Strait gas/oil fields when oil production from this area begins to decline early next decade, he told the annual meeting.

Israel F15 purchase

Israel is considering ordering more McDonnell-Douglas F15 jet fighters because of concern over a growing Arab air combat fleet, the Boston Globe reported yesterday, UPI says. The Globe in a report from Washington quoting "well-placed" sources said Israel will get the first deliveries from an order for a squadron of 25 F15s within a few weeks and was considering "whether to double that order."

The Globe said Israeli Air Force Chief Gen. Bennie Pelled "headed a team which recently visited F15 and F16 production facilities and bases in the United States." "Well-placed sources say Israel perceives a possible air combat weakness over the next five years, partly because of modern Soviet jets in Syria, Egypt, Iraq and Libya and partly out of concern that the latest U.S. jets headed for some of the Persian Gulf states might become involved if there is another Arab-Israeli war during that period," the Globe said.

Emperor opens Diet

Emperor Hirohito attended the opening ceremony of the Japanese Diet (Parliament) yesterday, and told lawmakers to carry out their duty "in response to the people's trust," reports UPI from Tokyo.

The Emperor's appearance in the Diet marked the formal start of the 78th session of the legislative body which was called by Prime Minister Takeo Miki's conservative Government to discuss key financial bills pending since early this year. Communist Party members, who oppose the Emperor system, boycotted the ceremony attended by members of the lower and upper houses.

New Ethiopian notes

Ethiopia to-day announced plans to introduce new bank notes next month to replace those bearing the head of the late Emperor Haile Selassie, overthrown in a military coup two years ago, Reuter reports from Addis Ababa.

Rupee rises against sterling

NEW DELHI, Sept. 21.

THE Indian rupee was revalued upwards against the pound sterling to-day for the seventh time in a year, by a margin of nearly four per cent. The Reserve Bank of India in Bombay fixed the middle rate at Rs.15.4 to the £ against the previous rate of Rs16 to the £ which had applied since May 29. The actual revaluation was 3.89 per cent.

The rupee, backed by India's largest foreign exchange reserves ever of some Rs.21bn. (worth £1.36bn. at the new rate), has now appreciated against the pound sterling by 16 per cent. since it ceased to be linked to the British currency on September 25 last year.

The rupee's value is now fixed in relation to a basket of currencies of its major trading partners. While it has appreciated against sterling, it has declined in value against other currencies, including the U.S. dollar.

Reuter

Zambia reform

President Kaunda of Zambia yesterday announced a policy of so-called "communocracy," which will ensure collective ownership of natural resources, our Lusaka correspondent writes. In his speech at the opening of the national council of the country's ruling United National Independence Party, President Kaunda said the policy would give more power to the peasants and workers, to bring forward the creation of a "people's economy."

IRIAN JAYA

Indonesia's poor relation province

BY HAMISH MCDONALD, JAKATA CORRESPONDENT

THE ADMINISTRATION of the Irian Jaya province of Indonesia is struggling with a massive debt burden incurred by irresponsible investment, in a situation similar to the scandal of the Indonesian state oil company Pertamina at national level.

The predicament is blamed on the former Governor of Irian Jaya, Brigadier Acub Zainal, who was abruptly recalled to the Defence Ministry last year where he now sits in limbo though on full pay. The parallels with the case of the sacked Pertamina chief, Lieutenant-General Ibnu Sutowo, are clear and indicate that General Ibnu's free-wheeling style of entrepreneurship had spread throughout the state apparatus.

General Acub Zainal committed the provincial administration to a $US25m. development programme entirely outside the budget he had submitted for Jakarta's approval. Pertamina-style, the comforts of his own personnel were given high priority. About $14m. was committed to a handsome new government office complex now two-thirds finished on reclaimed land near Jayapura harbour. Officials say another $20m. may be needed to finish it.

The Brigadier's projects recall Pertamina's former lavishness. As with Pertamina's $6.2bn. programme, the financing arrangements tended to be left until after contracts had been signed and work had commenced. Reportedly contracts were padded to allow generous rebates to government officials.

The problems of the new Governor, Colonel Soetran, can be imagined when it is realised that his entire budget for 1976-77 is not quite $50m., of which all but about $750,000 is an allocation from the central government. Brigadier Acub Zainal still has his defenders who use much the same arguments as are employed to support General Ibnu Sutowo: that he was largely a self-trained administrator trying to break the stifling bureaucracy besetting Indonesia, unorthodox though his methods might have been. But according to one senior military officer familiar with Irian Jaya: "Acub Zainal just made the gap too wide. Irian Jaya is not ready for the projects he started. Too big a gap between those at the top and the small people will damage stability."

The blunder will inevitably increase the widespread resentment among the Melanesian-race Irianese against their rulers from Java, Ambon, Sulawesi, and Sumatra. Immense tensions still exist, not helped by the sight of Papua New Guinea next door cutting a path as perhaps one of the best prepared of the world's new nations following its independence from Australia last September. When a Royal Australian Air Force aerial survey team arrived in Biak last month to carry out a mapping project, strong rumours swept the town that the Allies were sending an army to liberate the Irianese from Indonesia. Local authorities had to send a loudspeaker van around to explain why the RAAF team was there.

In Jayapura a group of Irianese civil servants told me: "We are enemies. The Indonesians don't mix with us because they know fights would start." So far the Irianese do little about their grievances. The territory's only insurgency, that of the Free Papua Organisation (OPM), is thought to be carried out by a handful of guerillas only in sparsely populated jungle near the Papua New Guinea border. Its propaganda headquarters are in Senegal. The local Indonesian military commander, Brigadier Imam Munandar, claims that 20 guerillas recently surrendered and another 50 fled across the border.

Irian Jaya was retained by the Dutch after the rest of the Netherlands Indies had become independent as Indonesia. A tragi-comic military confrontation forced the isolated Dutch to hand it over in 1962-63, with expectations raised by a last-minute crash development programme.

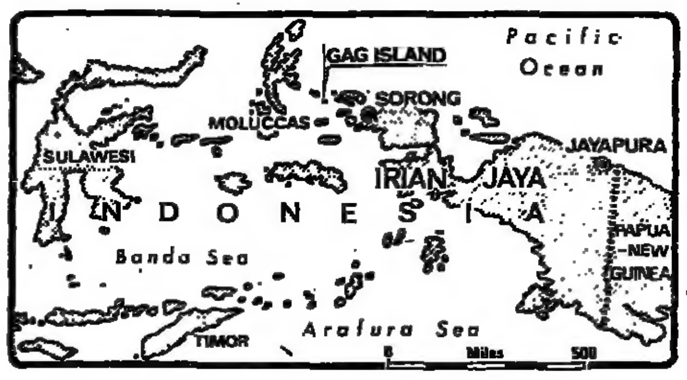
The new rulers, in a country put into economic reverse gear by the late President Sukarno, plundered their acquisition. The Suharto government has made some impressive efforts to remedy the damage and speed up development. Jayapura and Biak, once described as shabby and depleted, are energetic South-East Asian towns with a variety of markets and shops, and efficient public transport systems. Schools are numerous in the towns, with no apparent barriers between Irianese and western Indonesian children. The élite live comfortably, but not luxuriously.

The province will have six of the 40 earth stations being constructed to link up to the domestic communications satellite launched on July 8, and now has two or three airfields capable of taking jets. Immense mineral wealth has been discovered, with the giant Freeport Minerals' copper mine at Tembagapura having recently proven new reserves extending the life of the workings from the early 1980s to the end of the century.

A consortium of American steel enterprises is studying a $1bn. nickel project for Gag Island, near the "Bird's Head" peninsula. Close by, near Sorong, the Petromer Trend Corporation is working one of Indonesia's most profitable oil fields, and other exploration is showing promising results along the south coast. The immense stock of timber has been concessioned out, mainly to Japanese interests, and is expected to enjoy a new boom as the market picks up and the more accessible forests of Kalimantan are worked out.

Yet local Irianese participation is tiny, even in peripheral supply-lines. Much of the food for the towns, even eggs, are flown in from other provinces.

Although officials say the Government has slowed down its campaign to "civilise" the Irianese tribes of the mountains and swamps, many instances of heavy-handed authority are reported.



Indonesia appears to be rebounding from the problems caused by the financial troubles of Pertamina, reports AP-DJ from Jakarta. The first statistical report by the Central Bank since Pertamina's collapse more than a year ago suggests that Indonesia's foreign-reserve position has improved with increased oil exports.

It says that Indonesia's foreign reserves rose in the first 7½ months of this year to equivalent of $1.11bn. from $490m. last December.

WORLD TRADE NEWS

Pledge sought on nuclear safeguards

BY DAVID FISHLOCK

RIO DE JANEIRO, Sept. 21.

NUCLEAR EXPORTING nations should make it an absolute condition of any contract that the receiving nation accepted UN safeguards against proliferation of nuclear arms on its entire nuclear programme, and not just on the imported portion. Dr. Sigvard Eklund, director-general of the UN's International Atomic Energy Agency, told its annual meeting here to-day.

In an uncharacteristically blunt public statement on the dangers ahead from nuclear proliferation, Dr. Eklund warned delegates in the opening address that they could be "nearing the end of the line" with the Non-Proliferation Treaty (NPT), negotiated six years ago.

Certain countries showed no signs of accepting the NPT or of voluntarily placing the whole of their nuclear activities under IAEA safeguards.

Although he did not name any nation, it is understood that the nations causing the Agency greatest concern at present include the host country, Brazil, and its treaty with Germany for joint development of uranium enrichment and nuclear fuel reprocessing, together with Argentina, Egypt, Israel, Pakistan, Spain and South Africa.

At present these nations remain free to attempt to build on imported technology and "know-how" to create an independent basis for nuclear arms having enough native novelty to constitute no infringement of the terms of their contracts.

Safeguards were a contentious topic, Dr. Eklund acknowledged. Contrary to what some nations professed, "safeguards are not loved by many nations." But for the first time in man's history an international safeguard system—however imperfect—had been established and recognised.

IAEA safeguards were already being applied to all nuclear installations in many countries that had not formally accepted total safeguards under the NPT. "In my view such countries would lose nothing and gain much by formalising the situation."

Japan's ratification of the NPT earlier this year brought the number of parties to the treaty to one hundred. They included three nuclear weapon states—the U.K., the U.S. and the USSR—and more than 70 developing nations. All major industrial non-nuclear-weapon states had accepted the NPT and its associated IAEA safeguards regime for nuclear installations, he said.

Dr. Eklund described reports of progress in the series of "secret" London meetings on proliferation between nuclear exporting nations—the last was in June—as "heartening" but appealed to the participants to keep his agency officially briefed on progress.

Interviewed by the Financial Times, Dr. Eklund said he had no doubt that the non-signatories to the NPT would not welcome his proposal for tighter safeguards, but he saw no other way of avoiding the divergence of the NPT regime and agency safeguards.

He did not see the London meetings as threatening to create a rival organisation, but rather as a group able to discuss certain questions about proliferation in a "less politicised atmosphere."

A major study by the Agency of the concept of regional fuel cycle centres, originally proposed by the IAEA and endorsed by Dr. Henry Kissinger a year ago, has abandoned as "impossible" politically, the idea of geographical groupings of nations to participate in multi-national fuel factories maintained under IAEA safeguards.

Instead it is exploring the idea—favoured by the U.K. Government—of multi-national factories owned by nations with special affinity of interests, as illustrated for example by Britain and Japan.

A status report just released by the Agency says that it has become evident that at least one of the partners in any such project would have to be able to contribute technology, the necessary industrial infrastructure, and part at least of the finance.

Dr. Eklund believed that the study so far "tends to indicate that such projects could be advantageous from an economic, safety and physical security and safeguards point of view." He has recently approached Finland and Sweden as potential participants in such a project in Europe and received a "positive" initial reaction.

But Dr. Eklund said that an important facet of the Agency's study was hampered by the reluctance of commercial reprocessing operators who, although not obstructive, were unwilling to contribute economic data and technical experience.

Czechs claim U.K. hampers trade growth with EEC

BY KENNETH GOODING, INDUSTRIAL CORRESPONDENT

THE U.K. was singled out as the country which had been particularly responsible for putting a brake on trade between the Common Market and the Comecon countries by the Czechoslovakian Minister of Foreign Trade, Mr. Andrej Barcak, at the Brno engineering fair.

Up to 1974, he said, the Comecon countries had been quite successful in liberalising trade with the EEC. But this changed last year because of the action by Britain "and some other countries."

Mr. Barcak referred in particular to voluntary undertakings given by Czechoslovakia to hold back exports of shoes and men's suits to Britain—"a strange way of limiting trade."

But in spite of the Minister raising this point once again, there are no signs that any damage, either short term or permanent, has been done to *Czech-U.K. trade relations.*

According to one of the British contingent at the fair, which ends this week (September 23), "the only time the Czechs will buy from the West is when they have to. And we have seen no sign at all that the British are not just as welcome as they have ever been."

Mr. Barcak made it clear that the Comecon countries continue to seek long-term agreements with the EEC which would set targets for the exchange of goods even though several previous attempts had met with no success. The EEC Commission was currently studying the latest proposals, he said.

Although over the past five years the volume of trade between the two groupings had tripled to $25bn., such an agreement would accelerate the growth of trade and widen the range of products involved.

"*I personally believe that* partnership and co-operation with Czechoslovak companies should be interesting to their partners in the capitalist countries, particularly now, when there is much unutilised production capacity and free financial funds in the West," he said.

As it happens, U.K. representation at the fair has been as heavy as ever this year. About 70 companies are exhibiting (out of the total of 2,000) mainly under group arrangements made by either the Birmingham Chamber of Commerce, the Federation of Construction Equipment Manufacturers, the Machine Tool Trades Association or the Scientific Instrument Manufacturers Association. This enabled the British Overseas Trade Board to give assistance.

Algerian $54m. order for Verkor

Financial Times Reporter

INTERNATIONAL SYSTEMS and controls (ISC) announces that its wholly-owned Belgian engineering subsidiary, Verkor, has been awarded a $54m. contract to design and supply a full integrated industrial plant for the production of particle board, plywood, veneering and sawn timber in Algeria. The contract was awarded by the Algerian Government corporation, Societe Nationale des Industries des Lieges et du Bois (SNLB).

Financing for the project was arranged by ISC and Verkor and will be provided through Kredietbank of Brussels, and guaranteed by the Belgian Export credit agency, Ducroire.

The plant will be located at Khenchela, in eastern Algeria, and will utilise local timber and fibre resources. The complex is being designed to annually produce 17,500 cubic metres of 5mm particleboard, 12,500 cubic metres of 8mm plywood, 4,000 cubic metres of veneer, and 8,000 cubic metres of sawn timber. The output will go into particleboard panels, plywood and cabinet-work panels, cross-grained veneerings and building materials.

Verkor, which was incorporated in 1948, was acquired by ISC in April, 1974. The Belgian company has developed proprietary particleboard and process technology and first developed the process to produce linex Verkorboard from flax shives.

Japanese TV producers may restrict exports to U.S.

BY DOUGLAS RAMSEY

TOKYO, Sept. 21.

FACED with new moves in the U.S. to restrict imports of Japanese colour television sets, the Japanese electrical appliance industry is now militating for pre-emptive voluntary restraint as the lesser of two evils. Despite this apparent reversal in the industry's position, however, the Ministry of International Trade and Industry (MITI) *is sticking* to its guns, and vice-minister Toshinobu Wada to-day reiterated that MITI has "no intention of asking the industry to limit its exports."

Mr. Wada's denial, however, is diminished by his simultaneous admission that "MITI is now keeping an eye on these exports of colour televisions." It is understood that this surveillance covers not only market shares of Japanese exporters to the U.S., but also export prices and contracts with American buyers.

The new industry position was clear in a statement on Monday by Mr. Kaoru Iue, president of Sanyo Electric, in which he indicated Sanyo and other colour TV exporters "cannot help but impose voluntary restrictions on our exports to the U.S. under the administrative guidance of MITI." It is not yet clear though, whether Sanyo's view is as strongly held among its competitors.

Mr. Iue's statement was apparently prompted by reports that a group called Compact (the American colour TV industry protection committee) is about to petition the U.S. International Trade Commission (ITC) for unilateral restrictions on the level of Japanese imports. Sources at MITI here say that no official communication has been received from the ITC through diplomatic channels, but that MITI understands the Compact request is based on Clause 201 of the 1974 U.S. Trade Act. This is the so-called "escape" or "safeguard" clause which would permit restrictions if a surge in imports has caused undue damage to the American colour TV industry.

In 1974 Japanese sets accounted for around 12 per cent. of colour TV sales in the U.S., then jumped to 19.5 per cent. last year. *So far in 1976, exports* have been running at over three times the level of last year, and the industry expects that if this trend continues, Japanese sets will garner a massive 30 per cent. of the U.S. market.

The compact petition to the ITC is the second major private initiative in a matter of months by U.S. manufacturers to control Japanese imports. Last March, several American companies including Sylvania, Philco and Zenith asked the ITC for a ruling against Japanese exports under Article 337 of the Tariff Act. This article, as amended by the 1974 Trade Act, calls for quantitative restrictions in the event of "unfair trade practices" on the part of foreign exporters. In the petition brought by the U.S. companies, Japanese exporters were charged not just with dumping, but more especially with benefiting from Government incentives which actually made the dumping possible.

The ITC has not yet ruled on the March petition, and sources here say such investigations can take between a year and 18 *months to run their course. This* lengthy process is no doubt a key factor in the Compact decision to bring suit on other grounds, *for* example, damage to the domestic industry caused by the higher level of imports.

It will not be hard to prove how many more colour sets the Japanese are selling on the U.S. market this year than last, and the Compact group is obviously counting on the Presidential election contest to swing President Ford to their side: he would stand to win votes by seeming to protect domestic industry (and labour, since trade union representatives are also members of Compact) from the Japanese trade onslaught. Under the provisions of the escape clause, President Ford could either increase the tariff on colour TV imports, or else put a quantitative ceiling on future deliveries.

As long as the ITC was digesting and investigating the March petition for evidence of unfair Japanese trade practices, MITI could afford to sit tight and let exporters push faster into the American market, planning all the while to issue "administrative guidance" to the opposite effect once the patience of the American authorities had been pushed to the limit.

That is the current MITI strategy, but it may have been ill-advised. U.S. authorities have traditionally been among the first to ask for voluntary restrictions, but sources inside MITI say this pressure from Washington has not yet been applied, and officials are worrying why not. Indeed, an ITC move to protect the American industry unilaterally would be a stronger, and more visible, assurance than voluntary controls by Japan. It would also be a bigger vote-getter, in which case voluntary controls of any sort may prove unacceptable to officials in the U.S. capital.

No doubt it was this fear that prompted Mr. Iue of Sanyo Electric to stick his neck out and suggest that voluntary restraint may be the lesser of two evils. MITI, for its part, is still studying the matter. Whatever is final decision, it may come too late.

U.K. invisibles surplus

BY DICK WILSON

BRITAIN'S £363m. visible trade deficit with Japan last year was more than covered by a £675m. surplus on invisible account covering shipping, insurance, tourism, royalties and financial services.

Bank of Japan statistics show an eight per cent. expansion in U.K. invisible earnings from Japan to reach $2.90bn. in 1975. The major increases were in insurance (up 35 per cent. to $405m.) and investment income (up 22 per cent. to $892m.). After deducting $1.40bn. for Japanese invisible earnings from the U.K., this left a net U.K. surplus *of $1.5bn., which at 1975* exchange rates approximates to £675m.

The tourism account shows $66m. earned by the U.K. from Japanese visitors, and only $7m. earned by Japan from British visitors.

British Treasury officials dispute the Bank of Japan invisible statistics, but have none to offer in their place. These figures are thus the only available indicators of the trends in invisible trade with Japan.

The Japanese thus argue that the result of their overall exchanges with Britain last year yielded a U.K. surplus of some £300m., including sales of services as well as goods. This is bound *to be raised by the Japanese side* when British officials complain about the trade imbalance.

Mission to Peking

TOKYO, Sept. 21.

JAPAN'S ASSOCIATION For the Promotion of International Trade said that a mission including trading company and bank executives will visit Peking for about seven days in early October to discuss ways of balancing trade between the two countries. Japan had a $730m. trade surplus with China in 1975, and a $306m. surplus in the first three months of this year.

Meanwhile the Japan-China Machine Trade Association said that Japan's machinery exports to China in July had a total value of $39.4m. on a customs clearance basis, down 28.9 per cent. from a year earlier. The exports accounted for 28.4 per cent. of the $138.539m. in total Japanese exports to China in July.

AP-DJ

P.O. orders from Mitsui in London

By Christopher Lorenz, Electronics Correspondent

MITSUI has become the second major Japanese group in less than a year to choose London as the centre for a private communications system.

Following the lead set by Mitsubishi, the Mitsui trading company awarded the installation and operations contract to the *British Post Office; in* Mitsui's case, this will bring the P.O. more than £600,000 of annual revenue.

The system is based on a message-switching computer and links more than 40 private telegraphic circuits between Mitsui offices in Europe, the Middle East and Africa. The system is also linked to Mitsui's own computer in Tokyo.

The new London installation will act as a "clearing house" for more than 20,000 messages a day; the purpose of the computer is both to control the switching of messages and to operate a storage and retrieval system which holds them for up to three days.

Since the P.O. began offering international leased telegraph messages switching services in 1971, nearly 30 organisations have based their international communications centres in London.

Phosphate projects

Sofremines of France and Schweizerishe Aluminium Ag of Switzerland have been awarded a Frs.22m. contract by the Egyptian authorities for civil engineering work involved in a *phosphate mine* at Abuttartur. The mine is expected to have an annual output of 7m. tons of phosphate. The two European companies will participate in the construction of a town of 30,000 inhabitants, a port on the Red Sea, and 500 kilometres of roads.

Meanwhile British Ropeway Engineering received an order worth over £300,000 from Stone and Webster Engineering for mechanical handling plant to provide increased ground storage for rock phosphates at the Shahpur Chemical works at Bandar Shahpur in Iran. Delivery of the new plant is scheduled for completion by August 1977.

Nuclear refrigeration

Carrier International has received a "multimillion dollar" contract to build a central refrigeration plant to cool the two giant new Iranian nuclear generating plants, Iran I and Iran II. Together these power stations will generate 2,400 megawatts of electricity when both are in operation in 1981.

The eight Carrier centrifugal machines making up the refrigeration plant, it is claimed, will be the largest ever built. They will produce a total of 80,000 tons (242 Gcal/h, 281,000 kW) of cooling. The machines will be delivered in 1978 and 1979.

High export hopes for Racal Radio

FINANCIAL TIMES REPORTER

A MAJOR contract for new radio equipment for the British Army's Clansman communications system is announced by Racal-Tacticom, part of the Racal Electronics Group.

The contract, thought to be worth £5m., is initially for a substantial supply of a personal radio—the Racal U.K./PRC-349—for use by front line forces. It is said to be the smallest and most technically advanced military VHF radio of its type in the world.

This order is expected to lead to orders worth at least £5m. at home with huge export sales in prospect. Mr. David Elsbury, managing director of Racal-Tacticom said: "The export potential of this British-made 400 channel radio is enormous. The acceptance of the set for use in the Clansman combat radio system will give overseas sales a big boost. Many of our major customers throughout the world have been awaiting this seal of approval from the British Army. Our marketing teams operating in over 120 countries report tremendous interest and I am confident in forecasting huge export sales. The U.K./PRC-349 has already been sold in large quantities abroad."

The U.K./PRC-349 is already in production and deliveries will begin before the end of 1976.

India's iron ore ambitions

BY P. C. MAHANTI, OUR CALCUTTA CORRESPONDENT

ALTHOUGH INDIA exported 23.5m. tonnes of iron ore in 1975-76 it contributed only 5.5 per cent. of the total world trade in iron ore in that year. India now wants to expand its share by a number of ways.

The most significant of these is the Kudremukh iron ore project on the West coast which is being developed entirely to export iron ore to Iran. Iran is financing the whole cost of this project, now estimated at $630m. It is a of course a loan which will be repaid in kind through ore exports. Iran has already advanced $100m. of this amount so that work can progress as scheduled.

According to the construction and delivery schedules fixed under the relevant Indo-Iranian Agreement the project is to be completed in 4½ years' time from now so that the first shipment starts in 1980. A total of 150m. tonnes will be shipped over a period of 20 years—7.5m. tonnes a year—to the National Iranian Steel Industries Company."

The Kudremukh project is the biggest iron ore mining enterprise in India so far. According to the Indian Ministry of Steel and Mines, comparatively new and sophisticated techniques and equipment like magnetic concentration, slurry pipeline and very large size mining equipment will be employed at Kudremukh.

The agreement with Iran provides that for the timely construction and smooth operation of the project, a well-experienced and reputed mining associate and engineer contractor should be appointed. Accordingly, the Indian Government has just chosen the Montreal-based consultancy concern of Met-Chem Consultants as "mining associate and engineer contractor." This company, which is a subsidiary of the U.S. Engineers and Consultants itself a wholly-owned subsidiary *of* the U.S. Steel, will be responsible for planning, design, engineering, project management and supervision, as well as the operation of the plant for the first three years. The Indian undertaking, Kudremukh Iron Ore Company will retain overall control, and will ultimately run the project entirely *with its own personnel.*

The target for India's iron ore exports is being progressively raised from 1976-77 onwards. The target for the current year is 26.5m. tonnes and it goes up, in stages, to 35.5m. tonnes by 1978-79 and then to 55m. tonnes five years thereafter. Even if these targets are realised, India's share in the world iron ore trade will have gone up to only 8 per cent. by 1985 as the world volume is expected to go up to 675m. tonnes by then from 460m. *tonnes at present.*

Considering India's vast reserves of iron ore, the targets are not too high. Her proved reserves are now computed at 13,000m. tonnes, most of it in high-grade haematite ore (the variety at Kudremukh is magnetite but the grade is as high as the best in India). In the world league of iron ore producers, India ranks seventh in terms of resources. In terms of production India stands ninth.

So far Japan has been by far the largest buyer of India iron ore, taking up to 43 per cent. of total exports. But now India is *looking to other customers as* well. With the opening of the Suez Canal, India hopes to export more to European countries: Iraq, in the Middle East and South Korea in the Far East have already emerged as substantial buyers. However, the major hindrance to a big expansion in exports such as is now contemplated is the general lack of bulk handling facilities in India ports, especially on the West coast. For instance, the Mangalore Port on this coast, through which all the iron ore from Kudremukh will be shipped must have the facilities for handling 60,000 dwt bulk carriers ready before shipping can start. These facilities are to be installed as part of a complete modernisation programme for the port which is being put through.

Even before the Association of Iron Ore Exporting Countries had been formed to get better terms for their ore through collective action, India last year managed to secure substantial increases in prices from Japan and other importers. This explains the 34 per cent. rise in earnings from iron ore exports in 1975-76 while the volume went up only marginally.

India is taking another route also—by exporting the ore in pellet form which brings in a much higher price than when only ore fines are exported. A small pelletisation plant of 0.5m. tonnes has been shipping its entire output to Japan since 1967. Now another plant of 1.8m. tonnes capacity is being built for export to the same destination, while Iraq has offered financial aid for a 2m. tonne plant that India proposes to set up for Iraq only.

Aker hopes for Shell contract

By Fay Gjester

OSLO, Sept. 21

NORWAY'S AKER shipbuilding group is negotiating with Shell about installation work on two steel decks for production platforms destined for the Brent Field, a spokesman for AKER has confirmed. However, he said no contracts have yet been concluded.

The concrete sub-structures of the platforms are now under construction in Scotland, while one deck is being built at a French and the other at a Dutch yard.

If AKER could secure installation work on the two decks, it would provide welcome employment for the group's Stord yard next year. Existing orders will not keep the yard busy much beyond the spring.

هكذا من الاصل

هكذا من الأصل

HOME NEWS

No rush for new North Sea exploration licences

BY RAY DAFTER, ENERGY CORRESPONDENT

THE DEPARTMENT of Energy has cleared the way for a substantial list of applicants for fifth round offshore exploration licences.

As yet, however, not a single oil company has applied for one of the 71 blocks and part blocks which are on offer, although the closing date for applications is only a fortnight away.

This is not unusual. A U.S. oilman commented last night: "You get no Brownie points for applying early." The Department of Energy confirmed: "Judging by past form, we would not expect to receive the bulk of applications until the last week."

The Department is expected to award the new licences late this year or, possibly in January. Mr. Anthony Wedgwood Benn, the Energy Secretary, sees the fifth round as the start of a new phase in offshore exploration and development. The round is much smaller than those in the past, indicating that allocations may be made more frequently in future, and for the first time the British National Oil Corporation will have a majority stake in all licences from the outset.

Offshore operators had warned the Energy Department that unless BNOC paid its full share of development expenses, as the costs were incurred, the Government might be faced with a muted industry response to the fifth round.

Companies told Government officials that a plan to give BNOC a "carried interest" in offshore development was causing concern among those involved in financing offshore operations. In effect, under the draft conditions for the fifth round oil companies faced paying for BNOC's share of development costs, only to be repaid once the field started producing oil and yielding revenue.

More Home News Pages 12, 16

Late last week Mr. Wedgwood Benn said that the idea of a "carried interest" for BNOC was being dropped. The Corporation would pay its way as a full commercial partner.

Expectations

Mr. Wedgwood Benn said the change of heart reflected the growing strength of BNOC which was emerging as a "major force in the world's oil industry." He denied that the announcement, coming so near to the expiry of the fifth round application period, was intended to influence oil company thinking. He was expecting a big response, he said.

However, it is evident from inquiries within the industry that if this important change had not been made there could have been a lack of serious interest in some of the less tempting blocks in the fifth round.

● British Petroleum is watching with interest the latest drilling operation on block 21/2 close to its Forties Field. BP has agreed, subject to Energy Department and other approvals, to take a stake in the block and two others (29/6 and 29/27) held under licence number P244.

BP has accepted the cost of certain drilling having acquired a 15 per cent. interest in the stakes held by Zapata Exploration, Canadian Export Gas and Oil and Carless Exploration.

Under the agreement BP is to pay a substantial part of the drilling costs on the present well. Total drilling costs could be as much as \$8m. (£3.4m.). This well is likely to reach total depth in about one month's time. BP has also agreed to pay a large proportion of costs if a fourth well is drilled.

The 21/2 block contains two reservoirs of interest to British Petroleum. An oil field, discovered last year, is thought in the industry to contain several hundred million barrels of recoverable reserves. It is this structure which is now being evaluated.

NEWS ANALYSIS ● PAPER AND BOARD

Squeezed by the cost of pulp

BY LORNE BARLING

CLOSE observers of annual figures coming from major Scandinavian paper and pulp companies have not been surprised by the crisis threatening the existence of one of the U.K.'s largest paper mills, Reed's Imperial at Gravesend.

Nor is the industry as a whole happy about a trend in pulp prices, reflected in the profits of those Scandinavian companies, which has steadily been working away at their margins on U.K. paper sales.

Bluntly, British and European paper mills, dependent on imported pulp and forced to compete in increasingly free markets with Scandinavian companies which can influence the price of that pulp, are extremely worried about recent trends.

Powerless

They argue that margins on pulp are too high (although not great) in relation to margins on paper, and they are powerless at present to exert any influence on pulp producers, including Canadian companies.

The price of market pulp has risen by about 35 per cent. in the past 18 months, admittedly as a result of inflationary pressures in the producing countries and sterling's decline, while paper prices have not moved significantly in relation to cost input.

As a result, the producers of high-volume grades of paper, such as newsprint and mechanical printings (which are largely dependent on imported pulp), have suffered seriously. Imperial has suffered "heavy trading losses" and two-thirds of the 1,250 labour force could be made redundant, Reed has announced.

The key to the problem, industry experts believe, is evident in the rising ratio between pulp and paper prices. For several decades this ratio has remained at around 50 per cent., with pulp at perhaps half the price of the end paper product.

But the events of the last two years—booming paper demand, the oil crisis and inflation among them—moved both prices rapidly upwards, yet significantly altered the price ratio to nearer 80 per cent. in some cases, such as newsprint.

It is estimated that in the U.K. these ratio changes have been half attributable to list price increase and half to sterling devaluation. The problem is now evident in France as well because of the weakness of the Franc.

More strident critics of Scandinavian competitors suggest that these currency problems are being exploited to make inroads into U.K. markets, by using a "scissors" movement of the two prices, though they are countered by claims that pulp suppliers must maintain their returns. The fact that pulp is sold in dollars and paper in sterling is nevertheless hard on U.K. companies.

What is not revealed in the reports of Scandinavian companies, enjoying the advantage of integrated mills producing both pulp and paper, is the real cost of pulp in their own papermaking.

But it is estimated that these mills can break even at around 55 per cent. of capacity on pulp production and 75 per cent. on paper, while an equivalent U.K. mill would need to operate at 90 per cent. to break even.

Worst hit

It is argued that the Scandinavians are prepared to accept lower profits on papermaking to boost returns on pulp, a claim apparently borne out by recent profits on pulp despite a comparatively poor recent market.

As a result, the slice of the cake (or tree) going to the pulp producer is possibly too large. While the U.K. industry does not begrudge this profit in itself, it does not wish to suffer as a result. Furthermore, this has had effects on the cash flow of papermakers, who now have to find about 35 per cent. more working capital than 18 months ago to hold stocks of pulp.

Ironically, Reed Paper and Board, a company which has made great strides in introducing new technology such as de-inking equipment for waste recycling, has been one of the worst hit by these pressures. It is currently using between 30 and 40 per cent. waste in its newsprint furnish, but its future at Imperial (as a low added value product) must be in doubt.

The mill, with five machines, is relatively modern but lacks the flexibility of smaller operations to match products to available markets, as many other British companies can do.

There have been recent reports that pulp producers are to seek further prices rises in January next year, again with Scandinavia making the running. But the Imperial crisis and the possibility of similar difficulties in France may instil caution on their part.

There is already considerable overcapacity in Europe in the printings and writings sector which is not expected to be taken up for several years, making it unlikely that supply and demand would be in balance even without a pulp increase.

The alernatives facing the European industry, which has not been quick to see the dangers, are all problematic, assuming that they will aim to restore a more balanced price ratio.

Resistance

One means is to increase paper prices, which mills would welcome but treat with caution because of possible consumer resistance. A reduction in pulp prices, the simplest option, would be strongly resisted by producers.

Similarly, pulp mills would be unwilling to hold prices steady while inflation continues to erode their margins.

The ultimate sanction remains the treaty between the EEC countries and the non-candidate, former EFTA countries, which includes a clause relating to "the abuse of a dominant trade position." This could be referred to a joint commission for their decision and possibly end in the suspension of tariff concessions.

However, this is an unlikely outcome unless some or all of the EEC countries find that their paper industries are being damaged beyond a tolerable level.

Shell soon resumes Celtic Sea search

ANOTHER upturn in Celtic Sea exploration comes with confirmation by Shell (U.K.) Exploration and Production that it is to resume activities soon.

The company's exploration department has said that it is to drill block 103/18, one of 12 concessions in which it holds exclusive rights in the U.K. Celtic Sea, during the autumn.

The block is 20 miles southwest of the entrance to Milford Haven and within 35 miles of Shell's 18-acre supply base at Pembroke dock.

Shell has not named the rig to be used but the newly-built semi-submersible unit, Sedco 707, partly owned by Shell, is expected to leave a New Orleans shipyard soon to drill its maiden well in the Celtic Sea's British sector.

The new rig can operate in 800 feet of water and drill nearly five miles into the seabed.

In 1973 Shell became the first company to drill in the Celtic Sea. The well, on block 102/28, more than 40 miles south-west of the new location, was abandoned as a dry hole.

OBITUARY

Sir William Collins

SIR WILLIAM COLLINS, chairman and managing director of William Collins and Sons, the publishers, died yesterday, aged 76.

As a young man, Billy Collins came to London from the family printing business in Glasgow which specialised in diaries, calendars and the Bible. He then started the general publishing list for which the company is famous to-day.

He proved an energetic and ambitious publisher with an astute eye for a best-selling author. His arrival in London coincided with the heyday of the library novel era and one of his earliest successes was Winifred Holtby's South Riding. Authors such as Howard Spring, William Armstrong and Hammond Innes were soon added to the list.

His forays into the detective story resulted in the founding of the Crime Club and the signing of Agatha Christie and more recently Alistair Maclean. Biography and military history were other areas to be explored, Arthur Bryant, heading the history list.

After the war it was the turn of wildlife. Sir William's interest had been awakened through his New Naturalist series started with Julian Huxley and James Fisher. Collins discovered Elsa the lioness, and Joy Adamson—a new kind of best-selling book which rivals were quick to emulate.

However, Collins was way ahead and Sir William's annual safari trips to Africa and elsewhere in search of new animal subjects became a legend in the business, and one that paid off handsomely.

A tall, athletic man with a passion for tennis, Billy Collins took a keen interest in all aspects of his vast empire. He was never reluctant to let a literary editor know if he considered a Collins book had been unfairly reviewed or, worse, ignored altogether, but his occasional outbursts were matched by a robust charm and his munificence as a host.

Leyland top job again vacant

By Kevin Done

BRITISH LEYLAND is expected to announce a replacement next week to head its parts and service operation, the second time the job has become vacant in 12 months.

Mrs John Egan, aged 36, the present director, has been appointed European marketing director of Massey Ferguson's industrial and machinery division, based in Rome.

His successor is expected to come from within the British Leyland ranks in line with the determination of Mr. Derek Whittaker, the managing director of Leyland Cars, to avoid the constant changes in the command structure, which were a feature of the previous British Leyland organisation.

Three schemes

The last Leyland senior executive to resign was Mr. Ron Ellis, who departed last month to take up the post of head of defence sales at the Ministry of Defence.

He is believed to have left after having an increasingly stormy relationship with Mr. Alex Park, the group's managing director.

Mr. Egan, who joined Leyland five years ago, was responsible for setting up three major schemes, Unipart, Supercover and SU-Butec, the operation which has welded together several previously separate components groups and now has a turnover of some £85m.

Mr. Egan said that he was leaving Leyland because of the opportunities the new post offers for the advancement of his career. The previous director of parts and service, Mr. Allen Sheppard, left 12 months ago to join Watney Mann and Truman as chief executive.

هكذا من الأصل

Peter Kilpatrick's a roughneck. His mum doesn't mind.

Until a year and a half ago, Peter was in hotel management in Birmingham. That's a pleasant sort of work. Mostly a matter of keeping the guests happy by making sure things in the hotel are going right.

So when he went home to Newcastle-upon-Tyne and told his family he was giving up the hotel job to become a roughneck, it took a bit of explaining. A roughneck, he told them, is a chap on an oil rig who helps the driller. It's a dirty job and a tough one. But this would be important, since it would put him bang in the middle of the North Sea work. The Kilpatrick family finally agreed that it sounded quite an adventure, and wished Peter well.

Now Peter Kilpatrick is on Beryl A platform, about 100 miles southeast of the Shetland Islands, where Beryl field – one of the big ones – has been discovered. Like most of the men on the platform, Kilpatrick works two weeks and then takes two weeks off. When he works, he *really* works. Twelve hours a day, seven days a week, in weather so fierce so much of the year it's hard for most people to picture. Peter likes it. He says the hard manual work is a lot more satisfying than fussing about in a hotel.

Peter Kilpatrick, roughneck, is part of one of the most ambitious, difficult, costly searches in history. Mobil has been in the thick of it from the start. Of course, our ties with Britain go back much further – to the 1880s.

More money and effort have been concentrated in this small area over the past decade, for oil exploration, than has ever been brought together anywhere else in the world. We and our partners, for instance, have invested more than £150 million in the Beryl A platform where Peter works, and spend about £30,000 a day to keep the platform operating.

The North Sea search is critical. If enough oil can be found, Britain will achieve the self-sufficiency she hopes for by the 1980s. That would help a very great deal to brighten an economic picture in this country which has been rather dark lately. The British have seen dark times before and worked their way out of them. Men like Peter Kilpatrick are helping the nation out of its current tight spot.

North Sea oil won't solve everything. But it should provide a good boost. No wonder Mrs. Kilpatrick is not unhappy with her son's new job.

Mobil®

HOME NEWS

Government steps up drive to find dole scroungers

BY DONALD MACLEAN

THE GOVERNMENT is stepping up its drive to curb illegal claims on social security benefits, Mr. Stanley Orme, Secretary for Social Security, said yesterday. Over 15,000 people were convicted last year and the figure is expected to be substantially higher this year. Collusive employers were "one of the targets to which we are turning our attention and we shall not hesitate to prosecute employers as well as claimants."

Fraud specialists were playing an increasingly effective part in the detection and prosecution of organised criminal gangs who have "set out to swindle the public." At the same time, anti-fraud drives based on local knowledge and initiative were proving successful. In recent months successful action had been taken against some claimants in full-time jobs, not only against those in casual work.

Yesterday's statement by Mr. Orme comes some weeks after the Derek Deevy case. Deevy received a six-year prison sentence after exploiting the supplementary benefits scheme by use of 41 false identities over seven years. He obtained £36,000.

His action was discovered when the police followed up a separate offence and found a filing cabinet of claim documents.

"We are never likely to have sufficient staff resources to enable us to visit all our claimants as often as we would like—both to look after their welfare and to check against possible fraud. So we are going to concentrate on the selective follow-up of certain types of claim where the risk of deception is more likely," Mr. Orme said.

There is to be a tightening of identity checks and ways to improve arrangements for issuing National Insurance numbers to new applicants are being examined. Full details of the plans were not being divulged to the public: "We need the element of surprise—the spot check, the unexpected interview, the off-beat home visit."

More than 15,000 successful convictions in 1975 reflected the growing success of detection work—more than double the 1970 level. The 1976 figure was well up on last year. Every week about 1,000 new cases were being investigated.

The number of special investigators of the department working in the field on the most difficult cases had risen to 471, from 370 in 1970. There had been strengthening of the headquarters' specialist unit on detection and prevention.

The numbers of fraud specialists would be increased if necessary, despite severe restrictions on manpower. More was to be gained in the short-term "by developing new techniques and deploying our existing specialist skills to the best advantage."

In addition, employers who came up against unfair competition by way of other employers' collusion with claimants "should let us know. All specific allegations of fraud are investigated."

The Government was determined to take rigorous action against fraud and abuse but it was not prepared to be driven into a witch hunt which would be damaging to the social services and harmful to good community relations. "We must see to it that vulnerable minorities who contribute greatly to the life of the country do not become victims of the hysteria."

Mr. Stanley Orme: Employers will be prosecuted, too.

Switch from branded medicines 'would save only 2% of cost'

A WARNING that patients' health could be endangered if doctors were persuaded to switch to prescribing medicines by their generic names rather than manufacturers' brand names is given in a report published to-day by the Office of Health Economics.

The Office, a research body sponsored by the U.K. drug industry, has drawn up the report in a bid to counter the frequently-advanced arguments that the use of brand names in prescribing adds excessively to pharmaceutical costs and can lead to confusion among the prescribers.

It says that in 1972 only a few preparations prescribed in any substantial quantity under the National Health Service could have been dispensed more cheaply if generic names had been used.

Potential savings are put at less than 2 per cent. of pharmaceutical costs for the year (£200m.). Claims that unnecessary duplication of pharmacy stocks results from keeping more than one brand containing the same active ingredient were exaggerated.

Brand names were an important method of underpinning the economic system which had produced the therapeutic revolution of the past three decades. Pharmacological progress was the main cost factor.

As to potential hazard by prescribing generic rather than branded products, the report says that medicines with the same active ingredients made by different manufacturers cannot always be assumed to have the same therapeutic action.

The report points to a growing preference among doctors for the use of branded products in prescribing. It says the proportion of medicines dispensed as branded preparations grew from 16 per cent. in 1949 to 82 per cent. in 1973.

The Office would like to see the term "branded" replaced on the grounds that it no longer sufficiently describes the role played by manufacturers' own preparations.

It suggests instead the term "pharmaspecific name" describes a specific medicine having a particular action in individual patients or groups of patients.

Brand Names in Prescribing. OHE, 162, Regent Street, London W1R 6DD: 50p.

More ferries to Le Havre

EXTRA autumn and winter sailings between Southampton and Le Havre are being introduced by Townsend Thoresen to cope with increased off-peak demand.

A new Saturday overnight service from Southampton at 23.00, and additional day sailings from both ports on Sundays, are to be run from October 9 to December 19.

North Sea ethylene gas plants urged

BY RHYS DAVID, CHEMICALS CORRESPONDENT

THE CHEMICAL INDUSTRY has been urged again to consider investment in new ethylene plants using heavy natural gas feedstocks from the North Sea. Dr. Dickson Mabon, Minister of State at the Department of Energy, made the call in a speech at Stavanger, Norway.

Dr Mabon, speaking at an Offshore Technology Conference, said that new petrochemical development based on ethane, due to come ashore with oil from Shell-Esso's Brent Field in 1979, could produce not only revenue but valuable employment.

If maximum economic and social benefits were to be obtained from such developments an overall strategy must be planned.

Various Government Departments were looking at petrochemical developments.

"There are companies interested in exploiting this valuable feedstock. What we must ensure is that petrochemical development is carefully controlled, taking full account of the environment, of infrastructure considerations, and of employment as well as financial viability."

Dr. Mabon made his remarks at a time when one of the earliest contenders for Brent Field ethane, Dow Chemical, appears to have lost some of its original interest.

Talks between Dow and the two operators of the field, Shell and Esso, have been put in abeyance, with Dow now evidently more likely to go ahead with other schemes for expansions on the Continent and in the Middle East.

More recently, Esso Chemicals has emerged as a possible customer for heavy natural North Sea gas liquids.

The company has confirmed that it is in the early stages of a review of the possibility of producing ethylene from ethane.

Though detailed engineering studies have yet to be undertaken, it is thought the plant would be in the range of 450,000-500,000 tonnes a year and cost well over £100m. No decision is likely for some time.

Plea for Bevin memorial

By Our Labour Staff

AN APPEAL to all sides of industry to contribute to a scheme to perpetuate the memory of the late Ernest Bevin, former Foreign Secretary and trade union leader, was made yesterday by Mr. Jack Jones, general secretary of the Transport and General Workers Union.

Mr. Jones, speaking at the opening of the Ernest Bevin room at Transport House, London, said that the scheme enabled shop stewards to visit companies abroad to assess different types of industrial relations.

Finniston for oil group

By Ray Dafter, Energy Correspondent

SIR MONTY FINNISTON, who this month retired as chairman of British Steel, is expected to join the Board of Cluff Oil, an independent U.K. oil exploration group.

Although Sir Monty will probably join the company as a non-executive director—the appointment is expected to be announced later this week—he will act as an adviser in two specific spheres.

He has been asked to advise on industry—Government relations and to help in the raising of funds in non-sterling areas.

Cluff Oil is currently considering a number of overseas exploration ventures which will require the injection of new capital. In particular, it is negotiating the acquisition of a share of an exploration project in the Persian Gulf along with a number of international oil interests.

The group's main business lies in the U.K. offshore oil and gas venture, however. Through its CCP North Sea Associates interest, it has a stake in Transworld's Buchan Field which may be declared commercial later this year or early in 1977. Drilling is now taking place on the find; if the test is successful it may be used as the first development well. Cluff is also seeking new acreage under the Fifth Round of licences.

NEB commitment on spending reaches £130m.

BY ADRIAN HAMILTON

THE NATIONAL Enterprise Board has committed itself to expenditure of more than £130m. in new loans and share purchases since its inception in November, it is disclosed in the Board's interim report issued yesterday. But there has been a disappointing response to its loan offer for machine tool stockbuilding.

The size of the commitment illustrates the extent to which the Board is running up against its State funding limits, put at a nominal £200m. a year in the last public expenditure White Paper, and why Lord Ryder, its chairman, has recently been pressing for an increase.

The Department of Industry has already agreed to provide £30m. of the £100m. increased loan capital for Leyland directly out of Industry Act funds and following a recent statement by the Chancellor of the Exchequer, it now looks likely that the Board's funds will be raised by about £50m. a year.

Its expenditure to date is largely made up of the recently announced £70m. addition to Leyland's loan capital to come from Board funds and a further £45m. which is being provided to Rolls-Royce (1971) in the form of £31m. new share capital and £14m. in loans.

In addition, the Board has increased its shareholding in International Computers (Holdings) at a cost of £7.1m. and in Brown Boveri Kent at a cost of £0.8m. It has also acquired shares in Data Recording Instrument Company and Agemaspark at a cost of £2.4m. and £350,000 respectively.

In spite of what appears to have been a generally disappointing reaction to its offer of loans to build up stocks of machine tools, the Board has agreed to make loans of £5.6m. for this purpose. Of this amount, £5m. is accounted for by Herbert, its own subsidiary.

Against this expenditure, not all of it actually spent in the first half of the year, the statement records a profit after taxation of £29.1m. for the period November 20 last year to June 30 this year.

This is almost entirely attributable to British Leyland, whose pre-tax profit amounted to £45.5m. for the period from February 25 when its shares were transferred from the Government to the Board. Rolls-Royce (1971), in the meantime, made a profit of £400,000 while Herbert continued to make a loss, at £700,000.

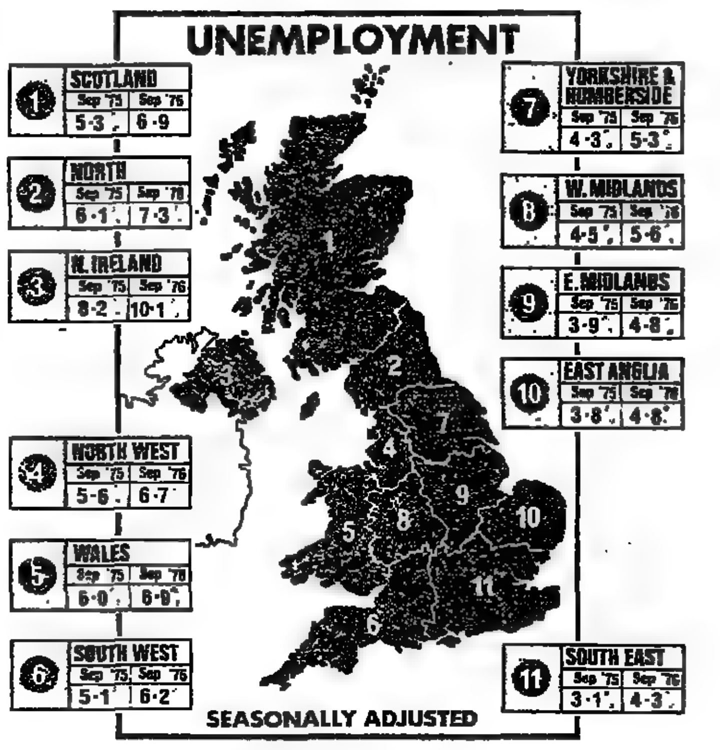
On its consolidated accounts to June 30, the Board made a pre-tax profit of £44.6m. on a turnover of more than £1bn. There was an excess of expenditure over income, largely in administrative costs, of £894,000.

The cost of its total shareholdings in Leyland, Ferranti, Data Recording, Herbert, Rolls-Royce, Agemaspark Brown Boveri Kent, Cambridge Instrument, Dunford and Elliott and International Computer (Holdings) is put at over £467m., including a nominal cost of £3,000 for its 35 per cent. shareholding in the Anglo-Venezuelan Railway Corporation—a consortium of major companies and British Rail established to tender for a major construction contract.

SHAREHOLDINGS AT SEPTEMBER 17

	Number of shares	% held by NEB	Cost £000
Subsidiary			
British Leyland	246m. ord.	95.1	246,491
Data Recording Instruments	2.4m. £1 ord.	53.9	2,407
Ferranti	4m. 50p ord. votg.	50.0	6,000
	2.66m. 50p ord. non-votg.	100.0	2,667
Herbert	43.63m. 25p ord.	100.0	26,180
Rolls-Royce (1971)	168m. £1 ord.	100.0	168,000
Other Investments			
Agemaspark	100,000 £1 ord.	33.3	100
	50,000 £1 pref.	100.0	50
Anglo-Venezuelan Railway Corp.	3,500 £1 ord.	35.0	3
Brown Boveri Kent	7.65m. 25p ord.	17.6	1,880
Cambridge Instrument	37.68m. 1p ord.	28.3	1,250
	4.76m. 10p ord.		
Dunford & Elliott	271,357 25p ord. votg.	2.6	122
Intnl. Computer (Holdings)	8.15m. £1 ord.	24.4	12,083
			467,233

Biggest jobless leap in S. East



A further substantial rise in unemployment in the South-East last month confirmed the narrowing of disparities between the U.K. regions.

Out of a total seasonally adjusted monthly increase of 9,900 in the number of wholly unemployed, the South-East accounted for 3,900. The only other area showing such a substantial rise was the North, with an increase of 2,500 on the same basis.

The South-East still has the lowest unemployment rate at 4.3 per cent., followed by East Anglia, where there was an actual fall in the jobless figure last month, and the East Midlands, with 4.8 per cent.

Still the worst affected area is Northern Ireland with an unemployment rate of 10.1 per cent., followed by the North with 7.3 per cent.

Differences have narrowed significantly, particularly in Scotland, one of the traditionally high unemployment areas, which now shows a rate of 6.9 per cent.

Special case plea by Ulster unions

BY OUR BELFAST CORRESPONDENT

ABOUT 250 workers at Unipork's Colin Glen bacon processing factory at Suffolk, near Belfast, are to lose their jobs when the plant closes at the end of the year.

The closure comes as a backdrop to the talks that the Northern Ireland committee of the Irish Congress of Trade Unions will be having with Mr. James Callaghan, Prime Minister, in London next month. The unions want 40,000 new jobs created in the Province over the next three years.

More than 60,000 people are now jobless and the committee claims that unless the Government treats Northern Ireland as a special case, the figure could reach 80,000 before the end of the year. The rate of 11.4 per cent. (10.1 per cent. seasonally adjusted) is the highest for a September since 1940.

Mr. Roy Mason, Ulster Secretary, briefly met both sides of industry during his first week at Stormont. He received proposals from several political parties on how to improve the economy.

The Northern Ireland Office is expected to set up a working party to examine how best to restructure the Northern Ireland Economic Council which has been inoperative since July.

Both the unions and representatives of industry have pressed for a restructuring to make the council more effective.

It will meet for the final time in its present form next month, and is expected to consider a report prepared by the economic strategy review Board set up by Mr. Merlyn Rees, former Ulster Secretary.

The report is complete, but its publication has been delayed until the economic council could give a date for its final meeting.

● A call for the Welsh Development Agency to begin an immediate programme of public investment to create jobs in areas of high unemployment has been made by Plaid Cymru MP, Mr. Dafydd Thomas.

In a letter to the Chancellor of the Exchequer, Mr. Thomas said the latest jobless figures showed that the underlying trend was worse in Wales than in the rest of Britain.

"To-day's scandalous unemployment figures should be a signal for more militant protests by the out-of-work and rank-and-file trade unionists against the shocking complacency of the Labour Government," he said.

BBC wants 'freedom to make profit'

BY ARTHUR SANDLES

THE BBC wants to be given the same freedom as nationalised industry to "make a profit," says Sir Charles Curran, its director-general. The Corporation is about to make its formal request for an increase in the licence fee, predicted as £27 for colour compared with the present £18.

Speaking in Sheffield, Sir Charles said yesterday: "What we want now, and what we shall ask for this autumn, is the same sort of realistic pricing treatment as was given to the nationalised industries about a year ago and which has put them back in the black, where they should be, and where we should be.

"We would be very happy to be given equal treatment with them, except that we have never had any deficit written off by the Government, and we do not intend to start now."

Sir Charles talked of BBC efficiency in production and the need for proper financing. "Although the BBC is non-profit-making, it is interested in financial efficiency: it is interested in proper pricing; and it is interested in investment and growth."

He said the Corporation kept track of its costs in "real terms" and that these had gone down in terms of costs per hour for all services since 1964. "It will only go up if the hours are cut."

The price charged was the licence fee. "For 50 years we have run our business, until lately without significant operating debts. And we have no accumulated capital debt whatsoever. We have paid for all our investment and growth for 50 years from the prevailing current price level charged for our services and from the in-built growth in our business."

Machine tool profits rise

BY OUR INDUSTRIAL STAFF

THE MACHINE tool industry, though recovering from very low levels, has shown considerable improvement in profitability in the last year, according to a report by ICC Business Ratios out yesterday.

The average return on capital in the previous financial year, 1974-75, was still only 1.1 per cent., says the report, but an export-led improvement was taking place.

The report is derived from a survey of 60 leading companies in the industry over a three-year period to April last year.

More than half the companies have managed to pull up profitability from low levels, some substantially, in the three years to April 1975. Extracts from the latest data of filed reports for 1975-76 show that these trends have continued.

The number of loss-making companies in the three-year period was halved between the earliest and latest years.

The factors involved in the improved performance of individual companies included increasing exports, shorter credit periods, faster stock turnover and better utilisation of assets.

Official figures indicate that exports are playing an increasingly important role, both in sales and new orders. The report shows that for many companies there is a strong link between an increasing proportion of exports to total sales and increasing profitability.

Business Ratio Report: Machine Tool Manufacturers. ICC Business Ratios, 81, City Road, London, EC1Y 1BD £36.

…ilip Attenborough (Chairman of Hodder & Stoughton)

"There may be aspects of our business where Midland Bank support isn't vital, but it's hard to think of any"

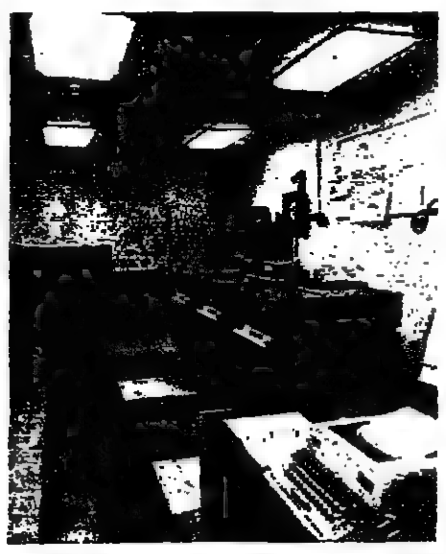
-Philip Attenborough, Chairman of Hodder & Stoughton.

"Book publishing is many things," says Philip Attenborough, "but most of all it is an act of faith. The process begins with the faith which leads an author to entrust a book to Hodder & Stoughton in the first place. It involves faith on our part, both in the author's work and in our ability to publish it well. Most of all, it involves faith in our judgement of how best to produce, market and sell books."

World markets

"But faith implies risks, and the risks of publishing are multiplied by the number of books we produce and the number of markets in which we deal.

Editorial Department



Computer Area

"From humble beginnings in 1868, Hodder & Stoughton now has about 5,000 different titles in print. And because books are a universal means of communication, we now sell to almost every country in the world.

"Because of faith in our main overseas markets, we have established local companies, representatives and agencies in them. All these are supported by a constant export drive carried out by salesmen flying out from London. My own career has been largely bound up with overseas expansion, and I have personally sold books in 54 different countries.

"Naturally, these operations require sophisticated financial support of many kinds, and that is why the faith of the Midland in us has been so important over the years."

Midland Bank support

"Since Matthew Henry Hodder and Thomas Wilberforce Stoughton founded the business 108 years ago, we have expanded enormously," says Philip Attenborough. "This expansion has called for

Reception Area (London)

some very understanding bank managers over the years, all of whom have occupied the same office of the same Midland branch in London.

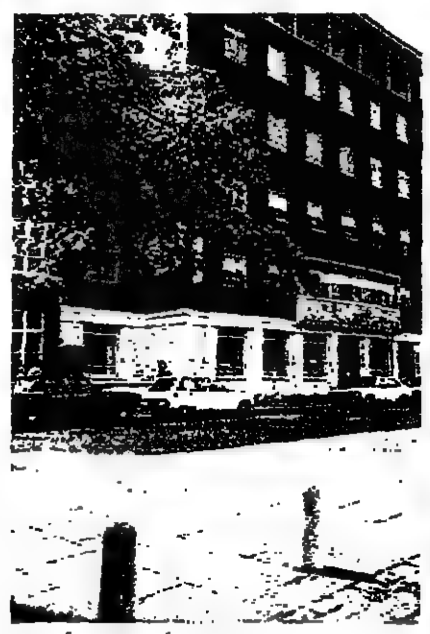
"The Midland has always advised us well. It has also been our chief ally in financing our growth into a £10 million company. And it has recently provided essential support for the building of our new computerised warehouse in Dunton Green, Kent. The computer itself is leased from Midland Montagu Leasing, another Midland Bank Group company.

"The bank helps in other ways. It helps with cash-flow problems which are seasonal, largely because of royalty payments to authors. On the export side, we draw and discount bills through the Midland, and they operate valuable ECGD facilities for us. Throughout the year they handle a large volume and variety of overseas transactions and provide us with essential credit information.

"At a more everyday level, most of our staff bank privately with the Midland, and all our salaries and wages are handled by the Midland's computer service."

Future growth

"The paperback market will keep growing," says Philip Attenborough. "So will our overseas markets. Children are reading more books than ever before. And there are important developments in the supplementary technologies of tape, audio-visual cassettes and microfiches.



London Headquarters

Model of new warehouse which has been constructed at Dunton Green, Kent

"We are confident of our future. Books will last forever. I see no prospect of there ever being a better means of sharing human knowledge, experience and ideas.

"But publishing will go on being an act of faith. So our prospects will continue to be closely linked to our relationship with the Midland."

If yours is a complex and developing business, arrange to meet your local Midland Group manager soon. It might make all the difference to your future.

Midland Bank Group

rincipal trading companies: Midland Bank Limited; Clydesdale Bank Limited, Clydesdale Bank Finance Corporation Limited, Clydesdale Bank Insurance Services Limited, Scottish Computer Services Limited; Northern Bank Limited, Northern Bank Development Corporation Limited, Northern Bank Executor and Trustee Company Limited, Northern Bank Finance Corporation Limited, Northern Bank Trust Corporation Limited; Midland Bank Trust ompany Limited, Midland Bank Group Unit Trust Managers Limited; Midland Bank Finance Corporation Limited, Forward Trust Limited, Midland Montagu Leasing Limited, Griffin Factors Limited, Midland Bank Trust Corporation (Jersey) Limited, Midland Bank Trust Corporation (Guernsey) Limited; Midland Bank Insurance Services Limited; The Thomas Cook Group Limited, Thomas Cook Limited, Thomas Cook Overseas Limited, Thomas Cook Bankers Limited; Samuel Montagu & Co. Limited (Incorporating Drayton), Drayton Montagu Portfolio Management Limited, Guyerzeller Zurmont Bank AG, Midland Montagu Industrial Finance Limited, Jersey International Bank of Commerce Limited; Bland Payne Holdings Limited, Bland Payne Limited, Bland Payne Reinsurance Brokers Limited, Bland Payne (UK) Limited, Southern Marine & Aviation Underwriters Inc., Bland Payne Australia Limited, London American Finance Corporation Limited, British Overseas Engineering & Credit Company Limited, Drake (UK) International Limited, Drake America Corporation, Export Credit Corporation.

The Technical Page

EDITED BY ARTHUR BENNETT AND TED SCHOETERS

● COMPUTERS

U.K. leads Europe in advanced design

SEVERAL apparently unconnected reasons lie behind the appearance of Ferranti as the only electronics company in Europe to have developed a micro-computer of its own and, at that, a machine made to higher specifications and by a more difficult technology than most of its competitors.

Perhaps the most cogent of all is the realisation, during a design exercise which took place some time ago, that other processors were not capable of being used for the more complex military jobs (and non-military work) which the company knew to be in the offing. One instance was the design of the company's Sonobuoy equipment. With a bought-in LSI processor, the handling and interfacing logic *for this device would have* required the use of 400 to 450 medium-scale integration chips, while with the 16-bit Ferranti design, the requirement was only 45.

This does not only mean a reduction of ten to one in device numbers, it also implies vastly less interconnection work, weight, maintenance, etc.

The second spur to development was, of course, the need of the military for a high quality device under their own control for use in applications where precision required is of an order of magnitude greater than possible with 8-bit computers. The joint development work on the device has cost several hundred thousand pounds, according to Ferranti, and is going hand-in-hand with important work to provide software tools that can be used on various other types of large computers to prepare programs for the new unit.

At the same time, prototyping equipment is being made available and work is in hand to write software that will be usable directly on the F100-L, with first products to be released in the first quarter next year. Later, the real-time language Coral 66 will be announced. Meanwhile, to the three basic chips, further bipolar memory and digital/analogue, etc. devices will be added.

Mr. Keith Dixon, one of the team responsible for the launch, believes that the major advantage of F100-L is that the same device is offered for military and civil applications. There is a temperature/speed coefficient which means that if a civil chip is overheated, all that will happen is that it will slow down *but not burn out . . . that is*, of course, within the extreme parameters set for it.

Two associated chips—control interface and data interface—would be used with the microprocessor to build up a set able to replace up to several hundred MSI devices; as indicated above. The instruction set provided includes normal arithmetic and logic instructions and the shift and bit-handling instructions needed for on-line operations.

The computer, made according to Ferranti's own CDI bipolar process, has about 7,000 components in an area only 0.23 inches square. In its military guise, it will cope with temperatures from —55 to +125 degrees C.

Instructions are carried out in 3 to 4 microseconds and the unit is powerful enough to handle up to 32,000 words of 16-bits in semiconductor or core memory.

It is significant that at this point in time, when some of the largest of the European companies have put their own microprocessor plans in cold storage and come to terms with the rapidly expanding U.S. microprocessor industry, Ferranti is confidently talking about becoming "a major force in European microcomputer systems in the next five years."

That the European market for such complex electronics devices will grow fast has been predicted by both Frost and Sullivan and Mackintosh Consultants, the latter putting European sales of devices in this class at $111m. by

1980 against $40m. this year. Bearing in mind price attrition in the electronic component market, the actual volume of product moved in the intervening years is likely to grow far more than the threefold the sales values indicate.

Ferranti has set up an OEM support centre and consultancy group at Bracknell and is offering training courses to prospective users.

It seems the company's biggest technological gamble since the Atlas computer, backed as it is by the U.K. avionics effort, could pay off. In view of the difficulties of its direct U.S. competitors, this could well happen much sooner than might otherwise have been expected.

Further from Ferranti Digital Systems Division, Western Road, Bracknell, Berks RG12 1RA.

● ENERGY

Solar cell cost drops quickly

THE COST of solar cells, which convert sunlight directly into electricity, has dropped 26 per cent. in the past six months, the U.S. Government has reported.

The Energy Research and Development Administration (ERDA) said that six months ago it was paying $21 to industry for a solar cell capable of producing one Watt of electricity. A recent ERDA purchase average $15.50 a Watt.

It said it had bought 130 kilowatts of solar cells from five companies for use in Government demonstration programmes. The price drop indicated "significant progress" in a drive to make solar electricity eventually competitive with conventional sources.

The effort has a long way to go, though. ERDA says the cost of solar cells would have to drop to about 50 cents a watt to compete with other energy forms, "a goal that might take until 1985 to achieve."

Meanwhile, electronic component makers like Ferranti and Philips seem confident they will achieve the goal much earlier, using semi-conductor technology.

Nickel-zinc could power a car

SPACE technology applied to the nickel-zinc battery may help to reduce petroleum consumption as recent tests conducted by NASA's Lewis Research Center have demonstrated that batteries of this type are able to provide almost twice the mileage of conventional lead-acid.

NASA says that a "properly designed" four-passenger electric car would have a maximum daily range of 60 miles using conventional lead-acid batteries. Nickel-zinc batteries are able to provide twice that at 120 miles per day and would be able to meet the needs of 95 per cent. of U.S. drivers for a full service urban vehicle.

A sample nickel-zinc battery at NASA's Lewis Research Center, uses cells fabricated by two industrial contractors. The cells feature an inorganic separator adapted from space battery technology which promises long life and high performance.

Engineers installed the battery in an Otis P-500 electric utility van, using only the battery space available in the vehicle and a battery weight equivalent to the conventional lead-acid battery. Tests showed that the nickel-zinc battery delivered almost twice as many stop and go driving cycles per charge as the lead-acid battery (190 versus 99). At a constant speed of 20 mph, the nickel-zinc battery ran the delivery vehicle 54.9 miles while the lead-acid battery yielded only 29.4 miles.

Lewis is conducting further studies to optimise the nickel-zinc battery for life, performance and competitive cost. A joint test programme with the U.S. Postal Service will assess the potential of these batteries for use in mail pick-up and delivery vans. The batteries will also be evaluated for urban use in a NASA urban test vehicle.

This is yet another battery couple under investigation in the U.S., alongside lead-oxygen, zinc-chlorine and several others. Britain is pinning its faith to sodium-sulphur, under active development at the Chloride Group with the encouragement of the *Electricity Research Council*.

More from Lewis, 21000 Brookpark Road, Cleveland, Ohio 44 135, U.S.

● PLASTICS

Laminate takes a hammering

STRUCTURAL strength of a new low-emission styrene resin, introduced by Synthetic Resins to meet the requirements of the Health and Safety at Work Act, was successfully demonstrated at recent high speed trials of a 50 mph speedboat on Lake Windermere.

Introduction of Uralam 25-01A polyester resin followed exhaustive tests not only into the reduction of styrene vapour emitted in processing, but also into maintaining the strength associated with polyester resins. During the trials the boat was subjected to severe buffeting, the hull frequently emerging completely from the water. No damage was caused to the laminate however. SRL at Edwards Lane, Speke, Liverpool L24 9HR.

Essential data from new centre

ERA's facilities to test creep/creep-rupture, and stress-relaxation have been extended to include plastics, alongside existing steel and non-ferrous *test equipment*.

As a result of the increasing demand for time-dependent data on, in particular, engineering thermoplastics but also thermosets used in electrical and other applications the new laboratory was commissioned. It is fully air-conditioned with temperature control to ±1°C and relative humidity to ± 1 per cent. Equipment installed to date comprises a Zwick 250 kg tensile testing machine especially suitable for plastics, and eleven creep/creep-rupture test machines.

Work has already been carried out on polypropylene and currently an intensive programme of work on the effect of test procedures on rupture data is under way. Aspects of the time dependent behaviour of polyethersulphone, a new engineering thermoplastic, are being investigated in conjunction with ICI.

Plans are being formulated, in conjunction with a number of major companies, to look at the economics of bulk data collection, in order to provide design engineers with more information relevant to the design of long-life products.

Further from Dr. M. P. E. Desvaux, manager, engineering materials and metallurgy department, ERA, Cleeve Road, Leatherhead, Surrey, KT22 7SA. Leatherhead 74151.

● SERVICES

Aid for the production manager

SPL INTERNATIONAL has set up a Manufacturers' Division at its St. James's Street, Nottingham, offices. It will aid manufacturing companies in the U.K. and overseas at production management level to bring greater efficiency to manufacturing operations through the application of data processing.

In addition to the familiar areas of raw materials and stock control, production costing and monitoring, and data processing, SPL will help to identify problem areas in production planning and control, will recommend and implement the most effective systems including, where necessary, both hardware and software, and will show how existing computer equipment can be used more effectively by extending its application into areas not generally covered.

Further from the company on 061 428 3600.

● PROCESSING

Laser makes its mark

THORN'S tungsten halogen lamp development and engineering unit at Enfield, evidently well pleased with its Ferranti MF400 carbon dioxide laser, has installed another.

Application is in cutting quartz, a material that has largely superseded glass in high intensity lamps since it can withstand high temperatures.

Previously it has been cut by nicking with a grindstone and then breaking, or cutting with diamond wheels. But the wheels are expensive and their thickness (1½ mm) wastes the expensive quartz; in addition the cutting fluid contaminates the cut ends which then have to be carefully cleaned.

The laser gave the answer; being opaque to the 10.6 micron infra-red wavelength at a focused power of 400 to 500 watts, the quartz is quickly vaporised and a clean chip-free cut of about ½mm width is produced which needs no extra machining or cleaning. More from professional components department of Ferranti at *Dunsinane* Avenue, Dundee DD2 3PN (0382 89321).

● INSTRUMENTS

Measures air flow in ducts

CLAIMED to offer advantages over a number of other existing methods of air flow measurement in ducts is the "Flow-Grid" system developed by Airflow Developments and already supplied to the National Coal Board for underground measurements.

It consists of a length of circular section standard steel ducting containing vertically mounted tubes. Some of the tubes contain forward facing holes drilled at about three-quarters duct radius from the centre and these sense the upstream total pressure. Rear facing slots cut into tubes on either side of duct centre sense the throat sub-static pressure. Tubes of the same kind are connected together.

The pressure differential between the two types of perforation as measured by a manometer connected across tapping points is accurately related to the flow of air through the duct, and may be so calibrated.

Obviating the relatively low pressure of the pilot tube, the system also does not incur the large pressure losses caused by an orifice plate. Furthermore, *location of the grid is not* important, and it acts as a screen to smooth out flow irregularities, making measurements easier. More from Lancaster Road, High Wycombe, Bucks. (0494 26352).

Better than a buzzer

PUT on the market by ITT Components Group are two audible warning devices employing piezo-electric ceramic as the sound generating medium.

Having no moving parts, the devices have a working life which is claimed to be 20 times longer than a conventional electromechanical bell or buzzer. One of the units works from 12 volts and has a long pulsed tone only, while the other requires 24 V and emits a continuous short-pulsed or long pulsed note.

Each of the models takes only 10 mA from the supply and yields a sound output greater than 85 dB. Their diameter is 90mm. depth 36mm. Applications will be found in security, automation and control systems and in general instrumentation. More from ITT Components Services, Refuge House, River Front, Enfield, Middlesex (01-363 7459).

Picking up very faint signals

DESIGNED to enhance measurements of low-level signals, a new Hewlett-Packard Model 10855A pre-amplifier increases sensitivity of instruments, such as 'scopes, counters and analyzers, by more than 10 times. Minimum gain is 22 dB (24dB typical). It operates from a power supply of +15 volts at 40 milliamperes or with those Hewlett-Packard instruments with a probe power output.

Among the design points of the Model 10855A are its gain of 22 dB or greater from 2 MHz to 1300 MHz, ±1 dB flat response, 50 ohm input and output impedances, fuse protection and reverse isolation of greater than 45 dB.

More from the company, King Street Lane, Winnersh, Wokingham, Berks RG11 5AR. Wokingham 784774.

● COMPONENTS

Signetics has Dolby circuit

AVAILABLE FROM the Signetics I.C. Marketing Group of Mullard is a monolithic integrated circuit implementing the Dolby-B noise reduction system. Type NE45B, it is designed for the reduction of hiss in mains operated open-reel tape recorders and cassette recorders, and high fm radio receivers.

The B-type noise reduction system operates by boosting low level high frequency signals in the encode mode and attenuating the same signals in a complementary manner in the decode mode. During the latter process, noise in the treated frequency range is also attenuated.

Three new 256 x 1 random access memories are the latest additions to the range of LOCMOS integrated circuits available from Signetics.

HEF4720 and 4720V are static RAMS with a stand-by power consumption of typically 5 micro amps. They are therefore specially suitable for memory systems in battery-operated equipment. By using an individual battery on the pc board, it is possible to build non-volatile RAM systems which keep the information over a long period and allow storage of the complete pc board separate from the equipment for later use of the stored information.

HEF4720 has a supply voltage range from 3 to 15V and an access time at 5V of 550ns. The HEF 4720V is an economy version for use with a supply voltage range limited to 3 to 10V. The HEF 4720V/S1 is a speed selected version available on special request; access time is 400ns at 5V and 130ns at 10V. The types are available in the standard 16 pin plastic or welded ceramic packages.

Mullard House, Torrington Place, London WC1E 7HD. 01-580 6633.

Simulates effectively

BECOMING AVAILABLE in this country is a fully integrated small scale hybrid computer system from Electronic Associates called Minihybrid.

Aimed at the educational, biomedical and smaller industrial markets, the computer is intended for the simulation of complex dynamic systems in real or fast time.

Basic system includes an EAI Datapacer digital processor with 16k of core memory and 133k of floppy disc, together with a parallel analogue processor, hybrid communications interface with 60 analogue/digital channels, and an ASR-33 teletypewriter for digital input/output.

The system can be easily expanded at any time after initial purchase to include an alphanumeric/graphic CRT terminal, an x-y plotter and additional digital, analogue and interface capacity. For simulation it is claimed that the machine can offer economies and operating speeds "just not available in the largest digital machines." More from Unit 33, Victoria Road, Burgess Hill, RH15 0JR (04446 5101).

More power for IBM's babies

EIGHT new models to the small, desk-sized, IBM System/32 and two new main memory sizes for the IBM System/3 Model 15D central processor unit (CPU) have been announced by the General Systems Division of IBM United Kingdom.

New models of the System/32 offer a line printer operating at speeds of up to 285 lines per minute, twice the existing speed, and a bi-directional printer with a speed of up to 120 characters per second. When combined with the System/32's four existing disc storage capacities—3.2; 5.0; 9.1 and 13.7 million bytes—the two new printers create eight new models.

Two new main memory sizes, 96,000 and 128,000 characters (bytes) have been added to the main memory range of the IBM System/32 Model 15D CPU, the capacity of which now runs from *96,000 to 256,000* bytes.

Meanwhile, in Atlanta (U.S.), IBM has announced a 25 per cent. cut in the purchase price for 115 General Systems Division key entry equipment.

The products affected are the 029 card punch, the 129 card data recorder and the 3741 data *station/programmable* work station.

IBM U.K. says that it is not known if or when these cuts will operate in Britain. More on 01-935 6600.

Sealed disc drive by Memorex

MEMOREX has joined in the plug compatible battle with an equivalent to the IBM 3350 disc storage system. This unit uses Winchester type technology that is the heads are sealed within the disc assembly, ensuring elimination of foreign matter and that the heads that write the data also read it.

Memorex is also offering a fixed head facility, as with the 3350.

The company's devices include the 3650, containing two data modules of 317.5 megabytes capacity; the 3653 containing two modules and the primary controller and the 3654 also with two modules and secondary controller, all the above having optional fixed head features. These devices attach either to the customers' installed Integrated Storage Controller (ISC) of a model 145, 148, 158, 168 or alternatively, through a Memorex 3674 outboard controller.

Memorex is at Hoechst House, 50 Salisbury Road, Hounslow. 01-570 7716.

● HANDLING

Sliding doors clip in place

FOR INSULATED and dry *freight side and end loading van* bodies, Cravens Homalloy (Garstang) has introduced a sliding door system to meet EEC health regulations.

The doors are top hung and secured at the bottom with retaining clips which fold flush with the floor when not in use. *This prevents the doors becom*ing jammed, as happens when conventional floor runners are damaged or blocked with debris.

If the load moves and becomes wedged against the door in transit, the doors can be lifted clear of the obstruction, says the company which is at Joe Lane, Catterall, Garstang (09952 4211).

Containers filled fast

FOAMING or non-foaming liquids *encountered in the food*, paint and chemical industries can be dealt with by a twin head semi-automatic filling machine put on the market by Neumo.

Up to eight 25 litre containers a minute, or 70 to 80 250ml ones, are typical filling rates, but the air-operated machines can top or bottom-fill volumes from 200ml to 200 litres to a guaranteed accuracy of ±0.25 per cent.

The units incorporate twin, quick-strip positive displacement pumps and reciprocating air motors equipped with six-position turret controls to give instant change of the pre-set volumes dispensed. Initiating air signal causing all functions to occur can be by a single or twin foot or hand control.

Standard equipment includes counterbalanced variable height to fill or automatic rise and fall bottom filling heads which are interchangeable and simply clamp into position. Quarry Road, Newhaven, East Sussex BN9 9DE (07912 4301).

● METALWORKING

Vacuum heat treatment for all

NEW LOW - COST vacuum furnaces by Vacuum Fusion Techniques of St. Ives, Cambridgeshire are intended for the large section which could, with advantage, employ vacuum heat treatments including brazing, sintering, etc., yet cannot justify the high cost of furnaces at present on the market.

Model 2025 is available in an entirely valveless system in conjunction with a special diffusion pump, eliminating much of the expensive logic and valves inherent in conventional furnaces.

The company is at Tenderlea House, St. Ives. 0480 63439.

● PRINTING

Watermark problem solver

DEMONSTRATIONS to the trade of a high speed watermark sheet cutter, designed, developed, and built by Strachan Henshaw sheet finishing division mark the culmination of 3 years' development in conjunction with leading security paper and watermark mills in the U.K., France and in Germany.

The new patented equipment is claimed not only to have overcome the drawbacks of existing machinery but to offer mills for the first time the facility of obtaining a complete installation direct from one manufacturer.

Strachan Henshaw is already a leading supplier of preprint register cutters used in the printing industry and has supplied these machines worldwide over the last 20 years. Particular problems on watermarks include the very large variations from mark to mark which involves the cutting system in making very rapid correction of the length at speeds of 200 cuts per minute.

The new system on demonstration in the Bristol factory is capable of correcting large discrepancies automatically and in fact monitors right up to the point of cut so that any changes necessary in the relationship of knife speed to web can be made. The use of latest fibre optics, digital control and high impulse encoders gives a constant read out of variation and the exceptionally simple operation results in very low wastage.

The company is at Speedwell, Bristol BS5 7UZ. 0272 558281.

Bemrose to get mini

COMPUTER-BASED typesetting equipment incorporating a Digico Micro 16V minicomputer is to be supplied by Comprite to Bemrose and Sons, the Derby printers

With two visual display terminals for make-up purposes, the system has twin magnetic disc storage devices giving immediate access to ten million ens of stored text. For proofing purposes a line printer is to be supplied.

As well as being used for the correction of text, the VDUs will allow the operator to interact with the computer to produce and change made-up pages before the production of film output. Initially, output from the system will drive Bemrose's Linotron 505 filmsetter, but the system is compatible with other equipment.

Comprite has developed programs to meet the needs of book and general printers; these have been modified for Bemrose to allow *such facilities as multi*-column composition, the automatic inclusion of running heads and folios of different types, optional pagination by column, line numbering at specified intervals and several others. Comprite is at Boreham Mill, Bishopstrow, Warminster, Wilts (09852 2922).

LABOUR NEWS

Work experience schemes for teenagers approved

BY CHRISTIAN TYLER, LABOUR STAFF

THE FIRST TWO "work experience" schemes under a plan launched yesterday for unemployed teenagers has been approved by the Manpower Services Commission.

Six others are ready to start, and between 16 and 18 will be recruited. Ultimately 30,000 young people are expected to be taken on for a minimum six months' taste of working life in factories, offices or shops.

30,000 need aid

The scheme, announced last month by the Government after consultation with the CBI and TUC, aims to help some of the 30,000 young people who, Mr. Richard O'Brien, chairman of the commission, said, may still be unemployed by the end of the year.

The first two projects are at ICI's agricultural division at Billingham, Tees-side, and at the Dartington Hall Trust, Devonshire.

ICI already runs a similar scheme of its own, and Mr. Peter Bayly, a former senior ICI manager, has been appointed to direct the programme.

Recruits will be paid a Government allowance of £16 a week, free of income tax and national insurance deductions. The Government expects the saving on unemployment and supplementary benefit to total about half the £19m. the scheme will cost.

Announcing details in London Mr. O'Brien said the commission was concerned over young people unemployed for a long time who might become "embittered with society and discontented with themselves."

But the commission will try to ensure that recruits are kept occupied enough not to become disenchanted by their six months' look at industry.

Projects will have to be vetted by employees and their trade unions, and employers required not to lessen their normal intake of trainees.

Those preparing the scheme have had some difficulty devising a programme both useful to the unemployed and yet not threatening the security of regular full-time employees.

Eight area units are to be set up in Glasgow, Sunderland, Leeds, Manchester, Birmingham, London Cardiff and Bristol. The commission hopes that the scheme will be extended and perhaps made permanent.

For the present "work experience" will run until the end of September next year; applications close after March.

Other job measures announced by the Government last month include cancellation of a £5-a-week school-leaver employment subsidy and its replacement with a £10-a-week youth employment subsidy, available from the end of this week to employers who take on any young person out of work for at least six months.

Job switch plan

Discussions are continuing on a "job swap" scheme for encouraging people within a year or two of retirement to give up work and let young recruits be taken on.

● The Inner London Education Authority will spend £70,000 to help unemployed school-leavers in Brixton find jobs. Subject to GLC approval, the project will start in January.

Mr. Jim Slater (in shirtsleeves, centre), general secretary of the National Union of Seamen, flanked by colleagues at yesterday's start of pay negotiations with the General General Council of British Shipping.

Terry Kirk

Union seek 'cuts' talks

BY DAVID CHURCHILL, LABOUR STAFF

CIVIL Service union leaders decided yesterday to seek an early meeting with their new Minister, Mr. Fred Peart, who took over from Lord Shepherd in the recent Government reshuffle.

The unions are anxious to impress upon Mr. Peart the substantial reduction in services to the public over the next three years which will follow the manpower cuts. About 26,000 fewer jobs—saving about £95m.—will be the result of the cuts and this will mean, for example, fewer staff involved in dispensing social security benefits and checking for tax evasion.

At the meeting with Mr. Peart, which is expected to take place within the next two weeks, union leaders also will say that they want the Minister to maintain the Government's no compulsory redundancy pledge. Instead, any manpower savings should be achieved through natural wastage.

Immediately after yesterday's meeting, leaders of the two largest unions—the Civil and Public Services Association and the Society of Civil and Public Servants—went to Manchester to take part in a rally against manpower cuts.

Some union members working in Government departments are banning overtime and refusing to take on new work in protest at the cuts.

Pay blitz catches one in four

MORE than one in four employers investigated during the first week of a blitz on low pay were found to be paying less than the statutory minimum set by Wages Councils.

From the seven towns in the first phase of the saturation investigations by the Department of Employment almost £10,000 in total was found to be owing to more than 200 of the 1,500 employees whose wages were examined.

Vauxhall and unions to continue talks on lay-off pay deal

BY ROY ROGERS, LABOUR CORRESPONDENT

VAUXHALL MOTORS and union representatives of its 21,000 manual workers are to continue discussions on improved lay off pay arrangements as part of their Phase Two pay settlement which comes into force to-day.

From to-day Vauxhall workers will benefit from 5 per cent. rises subject to the policy's £2.50 to £4 upper and lower limits.

They would normally have received their annual increase in May, but had to wait the necessary 12 months since their last main rise — part of an earlier staged agreement.

Other elements in this year's settlement include provision for up to four hours off with pay to attend pre-arranged hospital appointments or, in certain circumstances, to accompany wives, husbands or children on similar visits.

Union demands for full pay for workers made idle by external industrial disputes are to be the subject of further discussions next month.

The management has offered to improve lay-off pay from 70 per cent. of normal rates to 80 per cent., although so far this has proved unacceptable to the unions.

The bulk of Vauxhall production workers are on a basic rate of £56.60 a week with most skilled men on £62.20 including total rises of between £9.80 and £11 a week from their three-stage deal concluded in 1974.

Leaders of Ford Motors' 56,000 manual workers, who enjoyed a broadly similar long term deal, meet later this week to draw up and lodge their claim.

Although they have not had to delay their claim to comply with the pay policy, they may have to offset any cost of living threshold payments—automatic 1 per cent. increases for each 1 per cent in the Retail Price Index—which have triggered since the policy began in August.

● Talks to head off a strike by 800 car delivery workers, which is threatening to close most of the car industry in Coventry, were continuing late last night in Birmingham.

The meeting with shop stewards representing drivers at a dozen Silcock and Colling depots, officials of the Transport and General Workers Union, and the management was led by the Advisory Conciliation and Arbitration Service, which has tried unsuccessfully on three other occasions to find an acceptable formula.

The dispute, which started five weeks ago and now involves all 300 drivers in Coventry employed by four concerns, is over the redundancy of 17 drivers by Silcock and Colling.

Wright makes final bid to remain engineers' leader

BY ALAN PIKE, LABOUR STAFF

VOTING for full-time officials of the Amalgamated Union of Engineering Workers closes next month with the main interest concentrated on two second-ballot contests.

Mr. Bob Wright, defeated last year first for the general secretaryship and then in an attempt to retain his executive seat, is making his final effort to remain within the union leadership as an assistant general secretary.

He came second in the first ballot of this contest in the spring with 68,723 votes compared with 82,094 for Mr. John Boyd... British Leyland convenor at Llanelli.

Five other candidates now eliminated polled more than ... votes between them, leaving this month's final stage open.

Mr. Wright, a Labour Party member, has broad Left support and is one of the union's most respected negotiators, with a particularly high reputation in the motor industry. Until his election defeats he was the natural Left-wing candidate to succeed Mr. Hugh Scanlon in the presidency.

If he loses again this month the Left will be without any obvious contender.

This month's series of elections will also decide whether Mr. Jimmy Reid, who was one of the organisers of the Upper Clyde work-in, will enter full-time union office.

A Communist Party member until this year, he topped the poll in the first ballot for Scottish organiser, in the spring, with 13,389 votes, and now faces a straight fight with Mr. Tom Dougan, who polled 9,662.

The results of the voting are expected to be declared early in November.

Job tribunals 'not a free sweepstake'

BY OUR LABOUR STAFF

WORKERS who regarded unfair dismissal claims at industrial tribunals as a "free sweepstake" at the expense of their employers were attacked by a barrister at the Employment Appeals Tribunal yesterday.

The Tribunal awarded costs against a widow, Mrs. Charan ... of Sandwell, West Midlands, who pursued her husband's claim for unfair dismissal against his former employer after his death.

Mr. Justice Bristow, chairman, said that the company, Metal ... of Oldbury, had agreed the costs order should not be enforced without leave of the court.

Mr. Bruce Reynolds, for the company, had asked for costs to be awarded "in the wider interests of the Engineering Employers Federation."

He said: "If employees think a case, however hopeless, can be fought without any sanction it would be tantamount to saying: 'Here's a sweepstake, you ... lose and you don't have to pay for your ticket'."

● In another case yesterday a London industrial tribunal decided that Mrs. Kathleen Castle, a schoolteacher, was the victim of sex discrimination when Surrey County Council refused to consider her application as second teacher of a Church of England first and middle school.

The tribunal was told that Mrs. Castle's application had been blocked because a Burnham report on teachers' salaries said that the second teacher—third in charge after the head and deputy head—must be of the opposite sex to the deputy. As the school had a woman as deputy head the second teacher post should be filled by a man.

● Eight social workers at day centres run by the Psychiatric Rehabilitation Association yesterday failed to establish at a tribunal that their dismissals after holding a one-day strike were due to union membership.

They lost their jobs last month after striking in support of a demand that the National Union of Public Employees should have sole negotiating rights.

'Journalists' closed shop threatens freedom'

BY OUR LABOUR STAFF

A WARNING that single-union closed shop would create an "irresistible temptation" to increase editorial control and ... of newspapers was made yesterday by Mr. Maurice Green, president of the Institute of Journalists, on the opening day of the IOJ annual conference in ...eld.

Mr. Green claimed that a single-union closed shop would result in "one policy, one viewpoint and one philosophy throughout the country." Every ... of opinion had shown that readers wanted a genuine choice of papers and magazines and a variety of viewpoints.

"They do not want to choose only between different editions of Pravda."

Mr. Green's comments were aimed at the National Union of Journalists, which is affiliated to the TUC and which represents most journalists in the newspaper industry.

He alleged that the NUJ required its members to write or sub-edit nothing which reflected adversely on the union. "That rule alone could be interpreted or expanded in a closed shop world to forbid anything which could reflect adversely on trade unions in general or the TUC."

The NUJ last night denied that the union had a rule inhibiting its members to criticise the union. Over the last year union members had written critical comments on the NUJ's campaign for a closed-shop in the industry.

Speculators are buying pit homes, says NUM

SPECULATORS HAVE been moving in to Coal Board housing estates in the Kent coalfield since the Board said that it would sell its houses, according to the National Union of Mineworkers.

Their targets have been elderly and retired miners and miners' widows who have no hope of obtaining a mortgage when the Board offers them their homes at half the market value.

The speculators are offering to buy houses immediately the tenants have bought them from the Board. The tenant then gets a small profit from the speculator, who, says the union, will sell the house for enormous ...

Mr. Jack Dunn, secretary of the union's Kent area, said yesterday: "This is a disgusting move by speculators and get-rich-quick boys." The union was warning all tenants to ignore the offers.

Meanwhile, the union at Betteshanger Colliery near Deal—the largest pit in Kent—is opposed to the sale of the Coal Board houses because the older tenants could not obtain mortgages.

Mr. Nick Richardson, union branch secretary, said that the sale of the houses would retard recruiting. Waiting time for a local Coal Board house now was less than 2½ years, compared with more than four years for that of local authorities in the area.

APV/HALL-THERMOTANK MERGER

Strong partnership

BY GEOFFREY OWEN

AFTER THE experience of the last few years, when so many mergers have gone wrong, claims that a proposed take-over will lead to greater competitiveness and stronger overseas marketing are likely to be greeted with scepticism

In the case of the agreed merger between APV and Hall-Thermotank, which was announced yesterday, the claim appears to be rather more solidly based.

There is a reasonable prospect that the deal will produce a stronger British presence in an important and growing part of the engineering industry.

APV, with a turnover of about £100m. a year (three quarters of it outside the U.K.) and about 4,000 employees, is one of the leading U.K. manufacturers of process plant.

In recent years, it has sought to concentrate its efforts less on the "ironmongery" than on the processes (such as evaporation, distillation and homogenisation) which are relevant to the needs of its customers, particularly in the food and chemical industries.

It has sought, partly by acquiring other companies, to extend its range of processes and thus put itself in a better position to quote for turnkey projects overseas; it is clearly an advantage to offer a customer a package where all or nearly all of the key processes are under the supplier's direct control.

One gap in APV's range has been refrigeration, which is Hall-Thermotank's main business. It has, in fact, worked with Hall-Thermotank on several projects, but by bringing the company into the family APV hopes to be able to present even more attractive proposals to its customers.

Some confirmation of the "industrial logic" behind the merger is provided by APV's strongest international competitor, Alfa Laval of Sweden.

Middle East

This company's operations, like those of APV, have been increasingly oriented towards the development of complete processes and systems for the food and chemical industries.

To this end it acquired in 1973 Stal Refrigeration (another Swedish company which was majority-owned by ASEA) to fill an important gap in its range. APV has not followed this example.

The two companies complement each other overseas. APV has done especially well in the U.S., where Hall-Thermotank is weak. Hall-Thermotank has a stronger position in such markets as Black Africa and parts of the Middle East.

To a considerable extent the companies serve the same customers, particularly breweries, dairies and food manufacturers.

Hall-Thermotank, with a turnover of £53m. (about half outside the U.K.) and just under 6,000 employees, was under no financial pressure to seek protection in a larger group. The problem was that P & O, which had held 33 per cent. of the equity for a long time, indicated in 1974 that it was prepared to sell (the chairman of the company, Sir Iain Stewart, holds a further 20 per cent.).

The Hall-Thermotank management would have preferred the P & O shares to have been placed in the market or with institutional shareholders, so that the company could have stayed independent, but it seems that conditions in the stock market made this impossible.

The uncertain future of the P and O shareholding hung over the company like a sword of Damocles. A good many outsiders showed interest in buying it, but the management believes that the eventual decision—to merge completely with a company which is in a similar line of business is the best available solution.

So unlike Herbert Morris, which is fighting an unwelcome bid from Babcock and Wilcox, Hall-Thermotank is accepting its loss of independence gracefully.

In contrast to the Herbert Morris case *(which is described in an article on page 33)*, no ticklish considerations of competition policy are raised by this bid. Since both P & O and Sir Iain Stewart are irrevocably committed to accepting the APV offer, a peaceful outcome seems certain.

Growth of economy slows abruptly in second quarter

BY MICHAEL BLANDEN

ECONOMIC GROWTH slowed abruptly in the second quarter after the recovery in the earlier part of the year.

The latest estimates for gross domestic product indicate that growth in the second quarter was probably less than half per cent.

This figure, based on the best estimates available to the Central Statistical Office, is a significant downward revision of the initial figure published last month.

Confirmation of the slower growth rate provides statistical support for the strong recent indications that the economy has so far failed to take off at the rate which had been expected.

Disappointing

It will be regarded as disappointing by the Government, particularly against the background of the continuing rise in the level of unemployment.

More recent figures for industrial production in July have tended to confirm a slowdown in the rate of recovery, though interpretation of the statistics has been made difficult by erratic month-to-month movements.

These have been affected by changes in the incidence of holidays, while hot weather and the drought may have contributed to a drop in output in June.

The view in Whitehall, however, is that the statistics do not give any reason to revise the Chancellor's projections of growth over the next 18 months.

The official expectation remains that the level of activity will expand by around 4½ per cent. between the first half of 1976 and the end of next year.

A relatively optimistic outlook, it is argued, is supported by recent evidence from surveys of industrial prospects such as have been produced by the Confederation of British Industry.

In assessing the recent performance of the economy, the statisticians are relying mainly on the output-based measure of GDP, which is regarded as giving the most reliable indication of short-term movements.

The recent picture has been confused by the sharp fluctuations in the measure based on expenditure data, which of the three used is the least reliable.

This dropped sharply in the second quarter, and in turn brought a significant fall in the average measure of GDP using all three bases.

The average index fell from 109.0 in the first quarter to 108.1 in the second (at 1970 prices, 1970=100).

GROSS DOMESTIC PRODUCT AT FACTOR COST

SEASONALLY ADJUSTED (1970=100)

		Based on expenditure data	Based on income data	Based on output data	Average estimate
1974		110.6	110.5	109.4	110.2
1975		109.1	107.8	107.1	108.0
1974	1st qtr.	107.6	104.0	107.3	106.3
	2nd qtr.	111.5	111.1	109.9	110.8
	3rd qtr.	112.5	113.4	111.0	112.3
	4th qtr.	110.8	113.7	109.4	111.3
1975	1st qtr.	111.2	109.3	109.3	109.9
	2nd qtr.	108.4	107.6	106.9	107.6
	3rd qtr.	107.5	107.2	106.0	106.9
	4th qtr.	109.4	107.1	106.3	107.6
1976	1st qtr.	111.7	107.5	107.8	109.0
	2nd qtr.	108.4	108.0	108.0	108.1
1974	1st half	109.6	107.5	108.6	108.6
	2nd half	111.6	113.5	110.2	111.8
1975	1st half	109.8	108.5	108.1	108.8
	2nd half	108.4	107.1	106.2	107.2
1976	1st half	110.1	107.8	107.9	108.6

Source: Central Statistical Office

Rail chief orders fares policy review

A MAJOR review of rail fares policy is being undertaken at British Rail on the orders of Mr. Peter Parker, who took over as chairman last week.

It will be presented soon at a meeting of BR Board to plan the level of next year's increases.

The review will place much emphasis on the effects of the fares freeze which began in May and continues until the end of the year, and on special cut-price promotions which have been operating this year.

Mr. Parker wants his executives to provide firm figures for passenger receipts and an indication of present trends. In this field he will get his first good news since he took over from Sir Richard Marsh last week.

More users

British Rail said yesterday: "The standstill, coupled with promotions, has led to extra business, and the trend is now picking up."

Mr. Parker was alarmed at the reaction to reports last week that there may have to be two fare increases next year. But the Board maintains that no decision on the timing of the increases, or the level, has been made.

It warned, however, that in London and the South-East fares would have to go up in real terms by about 7.5 per cent. each year from 1977 to 1981 to meet the Government's ruling that there must be no increase in the State grant to the railways.

On top of that, there would have to be increases due to inflation.

More homes turn to solid fuel

SALES OF domestic solid fuel fires and boilers have gone up by 10 per cent. since March in spite of the hot summer, a Cardiff conference of European fuel distributors was told yesterday.

Mr. Donald Davies, National Coal Board member for marketing and a former Coal Board area director in South Wales, said that the increase was on top of a 5 per cent rise in the 12 months to March—a period in which the consumer durables market generally was depressed.

There was a swing back to solid fuel for home heating and a distinct trend among private householders towards installing appliances combining central heating from the living room fire and domestic hot water supply.

The solid fuel interests needed now to stay ahead by developing even more efficient and convenient boilers, heaters and fires, Mr. Davies continued. It would require an effort pooling world-wide knowledge and experience, which had already begun.

In the industrial market, while coal had running cost advantage for space heating and some commercial processes, capital costs of plant tended to be higher than with other fuels.

'Housing nightmare' blamed on profit

By Michael Cassell, Building Correspondent

HOUSING in Britain would remain "a nightmare" problem as long as it continued to be dictated by profit, according to a report released yesterday.

The report, published by the information and intelligence unit of the Government-sponsored Community Development Project, severely criticises nearly all the parties involved in the housing market.

The Project was set up in 1969 by the Home Office as a neighbourhood-based experiment "to find new ways of meeting the needs of people living in areas of high deprivation," and originally consisted of 12 local projects.

Controversial

Recently, the Home Office said that the central information unit, which prepared yesterday's report, is to be closed. The controversial nature of some of its past and projected work is thought by some Project staff to be behind the decision.

The latest report, based on four years of research in three areas, says that providing homes is incidental to money-making.

According to the Project, the housing finance review would fail to solve the problems. Private profit would remain the aim.

Mr. Timothy Raison, chief Opposition spokesman on the Environment, said that he found the report "astonishing"—a slick Marxist tract on housing policy with no attempt at objectivity."

Profits Against Houses: an alternative guide to housing finance. CDP Information and Intelligence Unit, Mary Ward House, 5, Tavistock Place, London WC1H 9SS; 50p.

Co-operative housing to be pushed

VIGOROUS ADVOCACY and development of various forms of individual and social ownership and tenure is central to the Government's future urban and housing policy, Mr. Reg Freeson, Minister for Housing, said at Enfield yesterday.

The forthcoming Green Paper on housing policy would have more to say about some of the Government ideas in that field.

Speaking at a ceremony to mark the start of the 6,000th house by the North British Housing Association, he said that much of the Housing Policy Review on which the Government was engaged was concerned with priorities in finance and resource use in order to improve housing conditions. But Government policy required a social or community dimension to housing.

There were about 12 co-operative housing associations operating successfully in various parts of the country and several more were being formed.

The Management Page

TRANSACTIONAL ANALYSIS

BY SUE CAMERON

A theory of behaviour patterns

THE BRITISH are always deeply suspicious of any management or selling techniques that smack of psychotherapy—especially when presented in that peculiarly American mixture of jargon and slang which bears a closer resemblance to Orwell's Newspeak than to the Queen's English.

Yet transactional analysis, an American theory of behaviour that can be used to give individuals a greater insight into their business relationships, is now being adopted by a small but growing number of U.K. companies as part of their training programmes. And in spite of its origins it seems to be proving successful.

One of the first companies to show interest in it was Aer Lingus, which heard about it through its operations in North America and decided to buy a transactional analysis training package from one of the U.S. airlines. In the event the package proved totally unsuitable for use in Europe so Aer Lingus set about adapting it. Much of the jargon was stripped out and eventually a two day audio visual training course was devised. This course now forms part of the training of all the airline's ground and air staff.

The Aer Lingus training package was so succesful that the company decided to broaden and market it. One customer was C and A Modes which uses it in sales staff training and it has also been bought by the Post Office, the biggest employer in this country.

Package

The Aer Lingus package (which costs £2,700) is not the only one available. Other companies using transactional analysis in one form or another include ICI and United Biscuits which has devised its own training courses. And this summer the Institute of Personnel Management published a report on the system called Transactional Analysis at Work.

The report, written by Keith Carby and Manab Thakur, outlines the basic theory of transactional analysis and details the experience of five British organisations that have used it. It also explains how the system was developed by Dr Eric Berne, a Californian psychiatrist and the author of the best selling book Games People Play.

The idea behind transactional analysis is that everyone has three "ego states." These are called parent, adult and child but the titles have little to do with age or chronology. All individuals are supposed to be able to move from one state to another. When people are in the parent ego state they act in a paternal way, either protective and caring or else authoritarian. The child state covers the emotional side of a person's nature while individuals in the adult state act in a purely rational manner.

The theory is that if someone can recognise the different ego states in others and then react appropriately, dealings with colleagues and customers become both pleasanter and more efficient.

For instance, a customer in an emotional or child state is likely to complain loud and long if asked to wait in a queue for even five minutes. This is not only uncomfortable for all concerned but is also time-wasting because a sale cannot be completed until the haranguing is over. And the situation becomes even worse if the salesman on the other side of the counter behaves in an emotional way himself and either shouts back or looks sullen.

But once the salesman realises what is going on he can control his own reactions and in addition can stop the customer in full flood by asking him a straightforward question that will force him to revert to his adult or rational ego state.

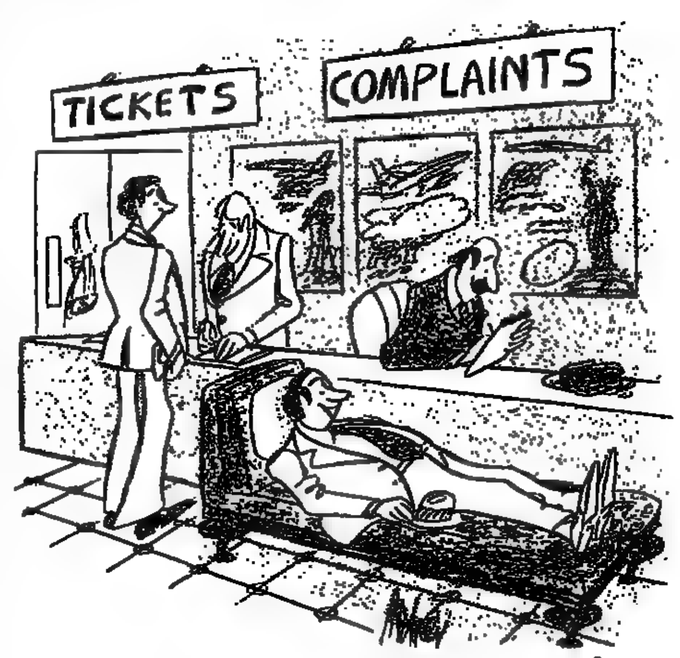
For instance, the salesman might ask which brand of goods the client wishes to be shown. And the customer will find it hard not to give a direct answer even if his manner is ungracious. As a result both parties can get on with the business in hand.

Psychological games, which people only play when in a child ego state, form an important part of transactional analysis. One example is the "why-don't-you-yes-but" game. A manager might ask a colleague how he can get his budget estimates out by the end of the week. He may be given a number of suggestions such as asking the boss for more time, asking a junior to help or doing the work at home.

But the manager will find some objection to every one of these possibilities simply because he does not really want a rational solution to his problem. He is feeling anxious and he therefore engineers a game which forces the other player to go into a parent ego state and to reassure and try to help him.

Games like these reinforce a person's image of himself and his attitude towards others. Managers who play the "why-don't-you-yes-but" game are likely to have a high opinion of those around them and a very low opinion of themselves. And in an almost masochistic way playing games proves to them that they were right all along in thinking they were inadequate and unable to cope.

People who feel they are superior to others also play games but of a different type. They might play the "now-I've-got-you-you-son-of-a-bitch" game which involves finding fault with colleagues or subordinates and berating them for it. Again, the game enables the player to reinforce his feeling of superiority.



The trouble with games is that while they are being played no-one does any work. Games can also create a bad atmosphere in an office or factory and what is worse they can cost a company money. Someone playing the "now-I've-got-you-you-son-of-a-bitch" game may be so intent on scoring points off a colleague that he will allow an expensive mistake to go undetected rather than give up his game.

But if a course on transactional analysis is incorporated into a training programme employees can be taught to recognise the various games that people play at work. And once someone realises that a game is being played he is in a good position to stop it altogether or at least cut it short.

Companies that use transactional analysis say that one of its biggest advantages is that the theory is easily grasped by people of varying ability. They claim it is also simple to use in dealings with others and they insist that it has led to an improvement in either customer relations or internal company relations—although the precise effect is almost impossible to measure.

Too glib

At the first hint of disbelief they all rush to point out that the system is not meant to be the definitive analysis of human behaviour. And some organisations will even admit that when it comes to explaining man's dealings with his fellows transactional analysis is far too glib to be credible.

On the other hand it does appear to be a useful tool in business life. Mr. Alan Wakely, training manager for C and A Modes, says his company has found transactional analysis extremely helpful.

"We are a service industry and our staff need to know how to get on with other people and how to approach the job of selling. Basically it is a matter of being pleasant to customers but exhortations to be polite are not enough.

"For even those who like selling and who are good at it often find it hard to know why customers act the way they do and why they themselves behave in a particular fashion. But transactional analysis helps train staff to think about themselves and to look at other people.

"We have taught this theory to 300 or 400 of our staff, starting with the more senior ones and though it is very hard to measure the results we believe it is proving effective. We are certainly going to continue with the present training programme."

Mr. Tom O'Grady, who helped devise the Aer Lingus package, says airline staff continue to apply transactional analysis long after their brief training in the technique. He stresses that Aer Lingus leaves it up to individuals to decide whether or not they will use the approach but adds that most staff seem to find it useful and passengers also appear to approve.

Since its introduction the number of complaints Aer Lingus receives has decreased slightly and even when passengers are angry about the loss of their baggage—nearly all airline complaints concern baggage—they are now careful to exonerate individual staff members and compliment them on their helpfulness.

The authors of the IPM report on transactional analysis say none of the companies they looked at had consulted their unions before introducing it in training programmes. The general attitude was that if the unions were consulted they would "not understand it but they would create quite a lot of fuss about it."

But the Post Office, which is hoping to teach transactional analysis to its counter staff, is working very closely with the unions on the question of bringing it in. The proposed introduction of the system is part of a plan to revamp the entire Post Office training programme.

Mr. Alan Tuffin, assistant secretary of the Union of Post Office Workers, said his union always co-operated with the GPO over training schemes and it was interested in anything that would improve relations with the public. He himself favoured the use of transactional analysis and he thought it would provide substantial benefits for both counter staff and customers.

"Our members take no pleasure in having lengthy arguments with the public," he said. "To-day all communications with customers are more difficult, partly because of necessary innovations like the anti-bandit screens. It is harder to talk through the screens, people become bad tempered if they cannot hear and the days of: 'Good morning, how are you?' have gone. Anything that will lead to smoother, pleasanter dealings is therefore well worth considering. And I'm quite sure our members would have no trouble in understanding the idea of transactional analysis and in putting it into practice."

Simplicity

ICI was attracted to transactional analysis partly because of its simplicity and the company has used it with some success in training programmes for managers and supervisors. The IPM report also agrees that the simplicity of the technique is one of its main assets but it points out that transactional analysis training schemes really need to be carefully tailored to suit the needs of each individual organisation. But it adds that the Americanness of the theory still seems to be a barrier to its widespread use in Britain.

At Cranfield management college the opportunity is offered to test entrepreneurial ability

School for ventures

BY NICHOLAS LESLIE

THE RECENT arrival on Britain's shores of Colorado beetles may threaten many a farmer's potato crop, but for John Schofield it is the sort of event which could provide a leg-up in what he expects will be his next venture—aerial crop spraying.

Formation of a company to provide such a service is still some months away. But virtually all the groundwork has been done and he has at least had the advantage of having been able to present his plans to a group of bankers, some of whom have expressed interest in providing financial backing.

For Mr. Schofield to have progressed so far in less than a year has been possible as a result of an MBA course available at Cranfield School of Management. An integral, though optional, part of this course is an "Entrepreneurship and new ventures" section which is designed to assess an individual's ability to launch a business, and it is in this section that Mr. Schofield has just emerged ahead of all others this year.

It is not merely a theoretical exercise. Anybody who completes this section of the MBA course should have developed his or her idea right up to the point where the business could be launched immediately upon the necessary finance being obtained.

The entrepreneurial section takes place in the second six months of Cranfield's year-long MBA course and accounts for 45 hours of a programme covering 180 hours. The first six months are taken up with a "core" course which everybody takes part in and which embraces all aspects of marketing, finance and other business subjects such as personnel management.

Before anyone can embark on the entrepreneurship course, however, he must submit his idea to a selection panel at Cranfield and it is at this point that a considerable number of proposals are "weeded out." According to Professor Richard Bruce, who until recently ran the course, people's motivations vary. For example, some are convinced that they are entrepreneur material and latch on to the course to get themselves launched into a business; others are not so sure and use Cranfield as a means of testing themselves.

Ideas which were accepted for the MBA course that has just ended were diverse, ranging from book wholesaling, a vehicle maintenance credit card and an MBA recruitment service to an anti-smoking device, a horse race betting system and a de-ionised water device.

At the preliminary evaluation stage, projects acepted receive up to a maximum of 20 per cent. of the total points they can achieve for the entire entrepreneurship section. There then follow interim and final evaluations—each providing a maximum of 20 per cent. of points—and up to another fifth of available points are then allotted for "course participation." This is judged on the manner in which, for example, the individuals have shown initiative in making best use of all the resources available at Cranfield itself.

The final fifth of available points are allotted by bankers, who come from such companies as National Westminster, Lloyds, Barclays, Midland Montague Industrial Finance, small business capital Fund and Commercial Finance Corporation, and who assess both the viability of a project and its potential as presented by its sponsor.

It is clear that those cut out to be entrepreneurs show through on the course fairly quickly. While many of the projects are sponsored initially by a small group of people, it often happens that one person will subsequently emerge as the entrepreneurial force. Equally, some groups split up when two or more entrepreneurial types find themselves unable to accept the other's leadership.

John Schofield falls into the latter category and parted company with his initial partner. Nonetheless, he apparently showed an ability to use the services and knowledge of others to prepare his project.

His route to Cranfield embraced an early career in the merchant navy, spells in journalism and public relations and then several months farming. It was the latter occupation, coupled with an interest in flying—he has had a private pilot's licence since 1971—that led him to the idea of aerial crop spraying.

His choice of Cranfield was deliberate. Although he was keen to get an MBA, it is clear that a prime objective was to use the entrepreneurship and new ventures section as a launching pad. And although he sold virtually everything to fund himself through the course he eventually got a Government TOPS—Training Opportunities Scheme—grant.

The project he put together embraced details of the history of aerial crop spraying, the potential for it in the U.K., the number and strength of other companies in the field, the type of aircraft suitable for the job, together with a detailed financial analysis of the funds required to launch the venture and the cash flow pattern necessary to take it through its first two years. He also provided details of verbal commitments from potential customers and an assessment of how much of that could be definitely relied on in the event of his going into business.

BUSINESS PROBLEMS

BY OUR LEGAL STAFF

An exercise in taxmanship

Early this year I read an article concerning the total withdrawal of an investment in a bank account, thereby avoiding tax on the interest for one year. In the same article it stated that this operation could be repeated every four years.

Can you please give me your interpretation of such a transaction; and let me know if this would apply to: a deposit account in one of the Big 4 Banks: a deposit account in a Building Society?

Since April 1973, U.K. building society interest has been treated (in the hands of an individual taxpayer) in virtually the same way as dividends paid by U.K. companies.

The exercise in taxmanship which you have read about relates to interest which has not been taxed (or deemed to have been taxed) at source, for example interest on a bank deposit account. The complex and arbitrary rules of assessment under cases III, IV and V of schedule D can sometimes be exploited to the taxpayer's advantage—so that part of his income escapes tax—whilst at other times their potential effect must be anticipated if the taxpayer is to avoid paying tax on more than he has received, perhaps even paying tax at more than 100 per cent.

The rules of assessment are set out in the following sections of the Income and Corporation Taxes Act 1970:

Schedule D Case	Type of Income	Sections of the Taxes Act
III	U.K. interests etc.	119 to 121
IV and V	Foreign dividends and interest	122 to 124 and 510

(a) £1,000 is deposited in December of tax year 1, with a bank which credits interest in June and December.

Tax year	1	2	3	4	5	6	Total
Deposit rate (to Dec.)	11%	11%	10%	8%	6%	5%	
Interest credited	Nil	110	100	80	60	50	£400

If the account remains open, the case III assessments will be:

Tax year	1	2	3	4	5	6	Total
Assessment	Nil	110	100	80	80	60	£430

But if the account is closed in year 5 and the £1,000 is then deposited (say) with another bank on the same terms, the assessments will be:

Tax year	1	2	3	4	5	6	Total
Assessment	Nil	110	100	80	60	50	£400

(b) Tax year	1	2	3	4	5	6	Total
Deposit rate (to Dec.)	11%	8%	5%	10%	11%	6%	
Interest credited	Nil	80	50	100	110	60	£400

If the account remains open, the case III assessments will be:

Tax year	1	2	3	4	5	6	Total
Assessment	Nil	80	50	50	100	110	£390

But if the account is closed in year 6, the assessments will be:

Tax year	1	2	3	4	5	6	Total
Assessment	Nil	80	50	50	110	60	£350

The only simple way to ensure that you do not pay tax on more interest than you have actually received is to close your bank deposit account every four years: you will then pay tax on the amount of interest actually credited to your account in each year. During a period of falling interest rates, it may be imperative to close your bank deposit account, to forestall penal taxation consequences, as the simplified example (a) may illustrate.

The opportunity to exploit the rules of assessment to one's positive advantage (as distinct from merely avoiding a prospective disadvantage) may come during a period of fluctuating interest rates. The example (b) shows the effect of a variation in the sequence of deposit rates from the example (a) above.

As long as inequitable and inconvenient rules remain on the statute book, they are fair game for exploitation. Eventually, these rules of assessment will be put on a rational and administratively convenient basis, but meanwhile they offer scope for minimising your tax liability, and a careful study of the sections listed above may be well worthwhile.

Preference share rights

With reference to our reply last week under the heading Preference share rights, it has been pointed out to us that the change from 7½ per cent. to 5¼ per cent. was presumably made in connection with the introduction of the imputation system of taxation and that, with Advanced Corporation Tax at 30 per cent. as it was at the time the change was made, the alteration was perfectly correct. We agree that this explains the company's action, but we still think that an explanation should have been given to the shareholders if this was the intention.

No legal responsibility can be accepted by the Financial Times for the answers given in these columns. All inquiries will be answered by post as soon as possible.

THE FINANCIAL TIMES

Established 1888
Incorporating THE FINANCIAL NEWS
(Established 1884)

Head Office Editorial & Advertisement Offices:
BRACKEN HOUSE, CANNON STREET, LONDON EC4P 4BY
Telephone Day & Night: 01-248 8000. Telegrams: Finantimo, London
Telex: 886341/2, 883897
For Share Index and Business News Summary Ring: 01-246 8026

Birmingham: George House, George Road 021-454 0922 | Brussels: 39 Rue Ducale 512-9037
Dublin: 8 Fitzwilliam Sq. 785321 | Rome: Via della Mercede 55 678 3314
Edinburgh: 18 Hanover St. 031-226 4120 | Stockholm: [illegible]
Leeds: Permanent House, The Headrow 0532 454969 | New York: 75 Rockefeller Plaza, N.Y. 10019 Editorial—212 541 4625 Business—212 489 8300
Manchester: Queens House, Queen St. 061-834 9381 | Washington: Second Floor, 1325, E. Street, N.W., Washington D.C. 202 347 8676
Paris: 36 Rue du Sentier 236.50.59 (editorial) 236.86.01 (business) | Jo'burg: 437 Union Centre East corner Pritchard and Harrison Streets, P.O. Box 2128
Bonn: Pressehaus 11/104 Heussallee 2-10 212596 | Tokyo: 8th Floor, Nihon Keizai Shimbun Building, 1-9-5 Otemachi, Chiyoda-ku. Tel: 241 2920
Frankfurt: Frankfurt am Main, Im Sachsenlager 13 555730 (editorial) 554667 (business)

WEDNESDAY, SEPTEMBER 22, 1976

Mr. Crosland's bluff

THE BRITISH Government must be desperately hoping that the threat—made by Mr. Crosland, the Foreign Secretary, in Brussels on Monday—unilaterally to declare 200-mile fishing limits on January 1 will not have to be carried out, but it is not difficult to see why it has been made. The Government will face formidable problems on fishing policy even if there is an agreement within the European Community: without such an agreement, there is a danger that it will look not only impotent but also ridiculous.

The interim agreement with Iceland — for which Britain fought and lost the cod war—runs out at the end of November. At about the same time, Norway is expected to introduce 200-mile limits of its own. Canada is due to follow suit on January 1 and the U.S. shortly afterwards. All of these unilateral acts are likely to cause a diversion of fishing to waters elsewhere, some of it to the already overfished waters off Britain.

Swaps

It is true that some of these countries, and Norway in particular, are not seeking to exclude foreign fishing altogether. The Norwegians have repeatedly sought to begin negotiations either with Britain or with the Community on reciprocal rights under which Norwegian vessels would be allowed to fish in British or Community waters in return for British or Community fishing in Norwegian waters. Indeed these kind of swap agreements are likely to become the rule rather than the exception once a 200-mile regime is generally established. The problem for Britain, however, is that it cannot negotiate with Norway nor anyone else directly because membership of the European Community means acceptance of the Common Fisheries Policy (CFP), and it cannot yet negotiate through the Community because the Community has not yet agreed on a joint position. The problem is especially acute in the case of a possible arrangement with Iceland because the short-term agreement which ended the cod war stipulated that any subsequent agreement would have to be reached with the Community as a whole.

The reason why Mr. Crosland threatened unilateral action was plainly to urge the Community to get a move on, and it is now known that the European Commission will be producing new proposals for adapting the CFP to 200-mile regimes later this week. Yet even if these are rapidly accepted as Community policy, there will still be potential difficulties with some third countries. It should not be hard to reach an agreement with Norway because, as the Norwegians have said, they would regard an agreement as in the mutual interest, but it may be a very different matter when it comes to the Russians, the East Germans or the Poles who are at present fishing off the British coast and who have virtually no reciprocal rights to offer. What is more, the Russians would be perfectly correct if they chose to insist that a unilateral British or Community declaration of extended fishing limits was illegal. Clearly this situation would be easier to deal with if the Community were acting together, though even then there might have to be some pretty tough negotiating. But if Britain were acting alone, is it seriously to be considered that the Government would send in the frigates against the Soviet trawlers as it did against the patrol boats of Iceland? And what if the Russians were to respond in kind?

Concede

There is one principle, however, which Britain could abandon in order to seek Community support. This is the claim to an exclusive British band within the 200-mile Community limit. The industry is demanding 50 miles and the Government somewhat less. Yet what matters is not the width of the band, but conservation policy. If the coastal state can secure control over the latter, it can in effect control the quantity of fishing. If the Government really wants the Community to move fast, it should concede this point forthwith.

More activity in labour market

THE UNEMPLOYMENT figures published yesterday are the most encouraging—or at any rate the least discouraging—to appear for a considerable time. For once it is appropriate to look at the total for all unemployed, including school leavers, as well as the figure for the "hard core" of unemployed adults. More than 52,000 school leavers—rather over a quarter of those on the register—found some occupation during the month; and though some of these will have decided to go back to school, there is nothing to suggest that the number was at all large. The problem of placing school leavers always appears exaggerated in August, and there was a good take-up even in the depressed labour market of September 1975; but whereas last year it appeared that this was partly at the expense of adults on the unemployed register, whose total rose by 36,000, this year there has been relatively little change in the (admittedly higher) level of adult unemployment, which has risen by 9,200.

Deceptive

This figure on its own could prove deceptive, just as the decline in unemployment in March proved deceptive, and remains difficult to explain. The average increase for the last three months, at 20,000, shows that the demand for labour is far from buoyant at this stage. However, there are some other statistics to support the idea that the labour market is now more active and in better health. The slowly rising total both of unemployed and of unfilled vacancies conceals the fact that the flow through both registers has grown substantially through the year. This means that despite the rising total of unemployment, a man on the register now has a significantly better chance of finding work than in January. The increase in the number losing their jobs has been much smaller. The turnover of vacancies has grown correspondingly.

Some further modest encouragement can be found in the fact that the improvement in the figures is somewhat less artificial than it was earlier in the year. The total number of people covered by the Government's job protection and job creation schemes is still growing (and the subsidy for employing school leavers appears to be especially helpful), but the increase in the number covered is no longer as rapid. In the spring the Government was facing a largely unchanged trend with the help of special measures; it is now more likely that the trend itself is improving.

However, it remains as clear as ever that unemployment will remain a major challenge to policy for a very long time. One reason was given in the last Bank of England Bulletin—the Employment Protection Act is making employers very reluctant to take on extra staff. This view is confirmed by the observation of the Department of Employment that overtime working is increasing even while unemployment continues to rise. A more fundamental reason appears in the revised figures issued yesterday for the gross national product.

Profits

These show not only that growth between the first and second quarters was much slower than was thought at the time—the annual rate appears to have been about two per cent.—but that investment reached its low point at mid-year. While there is now survey evidence of improving confidence, another figure will help to temper any enthusiasm this might arouse: corporate profits, net of stock appreciation, rose by less than two per cent. in terms of their share of national income from their low point in the second half of 1975. This is more like slow convalescence than rapid recovery.

Telephone conferences could save Britain £200m. a year of its primary energy bill. **Christopher Lorenz** examines the new technology and first reactions to it.

Putting over the message of teleconferencing

SHORTLY after the oil crisis began to push travel costs through the roof, and everyone was searching for energy savings, the Managing Director of Post Office Telecommunications declared that "telephone conferencing" would become "a major challenge to transport."

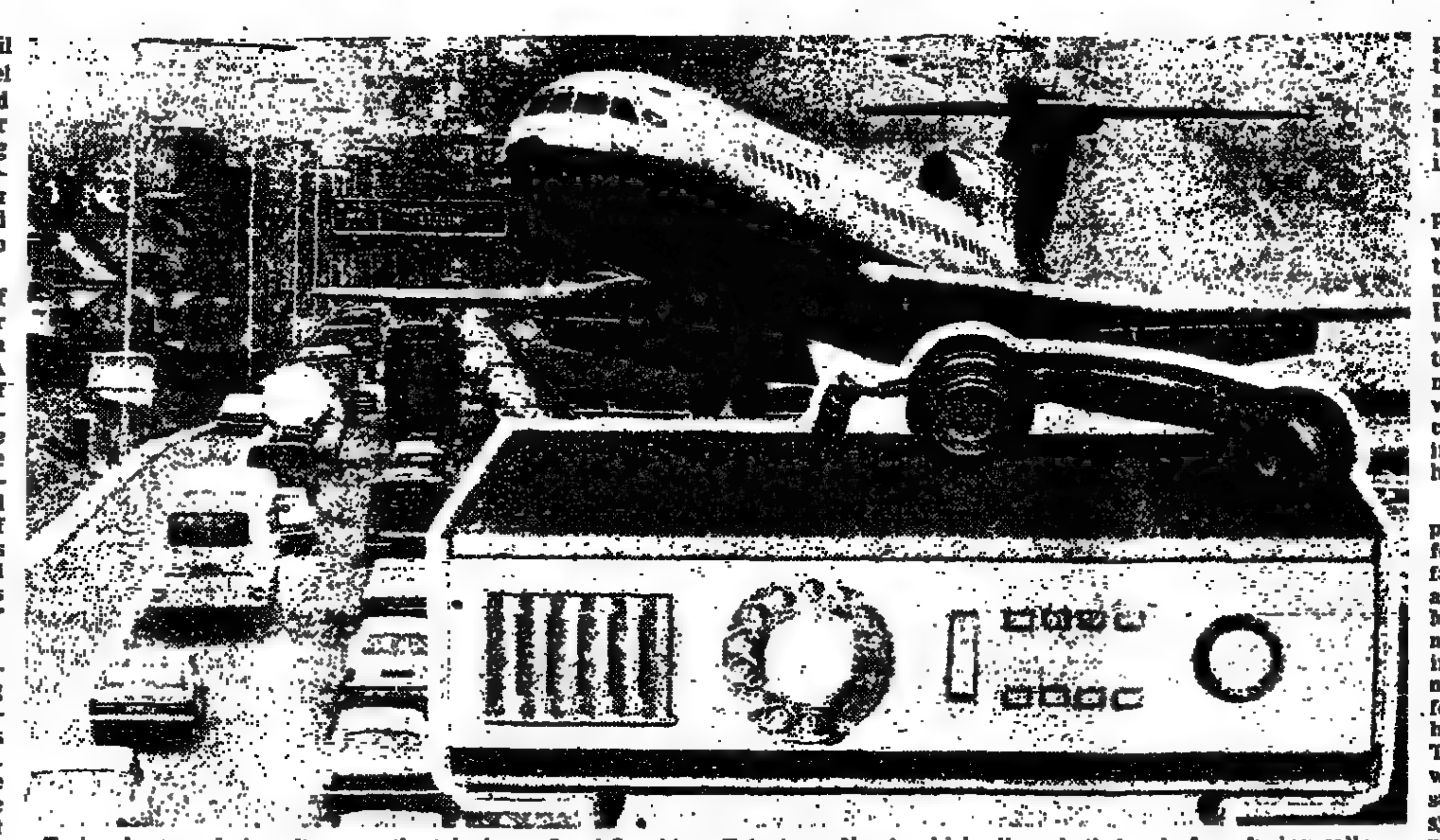
Two years later, it looks as if things could develop even faster than he imagined—though in a rather different direction. A large international body of research has just been completed, all of it underlining the scope for replacing face-to-face meetings by the telephone—with extensive social and economic consequences. One of the most surprising findings is that many businessmen would prefer to hold conferences without seeing their colleagues' faces.

Apart from sparing businessmen some of their most tiring journeys, telephone conferencing (or "teleconferencing") has its macro-economic attractions. A report just presented to the Organisation for Economic Co-operation and Development suggests that over 5 per cent. of national petroleum demand in the U.S. could be saved by greater use of teleconferencing in business. In Britain, some rather more thorough work on the economy suggests that at least 40 per cent. of face-to-face meetings could be replaced by teleconferences, resulting in a saving on the nation's primary energy bill of about 0.3 per cent., worth £200m. a year.

As with any new use of technology—and to many people's relief—there are problems. These were given an airing last week at a meeting in London. Some of the problems are technical, and the extensive psychological ones were illustrated by ICI. Post Offices everywhere would like to promote teleconferences, since widespread use would improve use of their existing assets, but none of them has yet found the right way of marketing the concept.

The meeting, which was organised by the Open University, was told by the Post Office that, until recently, the "spontaneous demand" for teleconferencing hardly justified Post Office investment. Now, however, the P.O. was "very conscious of the groundswell of demand."

The P.O.'s past marketing failings were explained in the Financial Times on August 17. But in this particular case, the P.O. cannot be blamed for neglecting the market entirely. What it may have done is to pin its hopes on the wrong product, just as the U.S. Bell System did with the famous "Viewphone," where subscribers could see as well as hear each other.



Trains, boats and aircraft versus the telephone: Loud Speaking Telephone No. 4, which allows both hands free during calls.

Both of them appear to have been driven by technically glamorous developments from their research departments, rather than allowing their marketing sides to dominate new product strategy.

Until it tailed off last year, almost all the P.O.'s publicity on teleconferencing was about its prestige "Confravision" service—a network of television studios in five major cities. But use of Confravision has fallen far short of the P.O.'s expectations, some people attributing this to the problems of persuading businessmen to use new means of communication, others to the fact that it can be just as troublesome to travel to a city-centre Confravision studio as to journey to a business meeting.

Document transmission

Some of Confravision's advocates are hoping demand will pick up when—or, perhaps, if—enough companies instal their own in-house studios. But there appears to be an increasing recognition within the P.O. itself, that Confravision will not become a major part of teleconferencing in this century, for a mixture of socio-psychological and cost reasons.

In the past four years, research into the potential for teleconferencing has been going on within Post Offices all over Europe. The British results, which are in line with those on the Continent, have just been released by the P.O. They suggest that well over a third of business meetings held in Britain to-day are potentially replaceable by cheap, sound-only teleconferencing facilities. By 1990 this could rise to about 40 per cent., but all forms of the (more elaborate and expensive) visual services could only add a further 3 per cent. or so. This forecast assumes a 75 per cent. drop in transmission costs, and even then would require the invention of a much simpler video-conference service than the current Confravision. If transmission costs were only halved (which might be feasible through the use of waveguides or optical fibres), the potential for visual services would be only about 1.8 per cent. of all the face-to-face meetings.

Nearly half the sound-only teleconferences would require some form of document transmission—such as facsimile—and virtually all of them would need relatively simple audio equipment in the form of a desk-top terminal with multi-directional microphone and loudspeakers. Only a very small proportion would need a more sophisticated set-up: such as the "Remote Meeting Table" used between London and Scotland by the Civil Service (especially the Scottish Office and the Energy Department).

Behind these calculations are years of social and psychological studies and tests, many of them by the London-based Communications Studies Group, which is now internationally recognised as particularly expert on teleconferencing: this was confirmed at last week's meeting by the supervisor of U.S. Bell Laboratories' programme, Dr. Christopher Stockbridge.

Upon this work, much of it for the P.O., a number of models have been built. This thorough approach makes the results much more reliable than many of the surveys conducted elsewhere in the past, which have relied either on intuitive judgments, or asking businessmen questions—often "leading" ones—about whether they would use one hypothetical system or another.

The work took particular account of all the obvious objections to teleconferencing, from the importance of "random conversations" and "non-verbal signals" (impatient jogging of a knee, for example), through the problems of "bargaining" over the telephone, to the host of apparently extraneous reasons people may have for travelling to a meeting (seeing friends, buying duty-free liquor, etc.). It was also more sophisticated than past surveys in trying to discover whether people would really need a picture as well as sound. To this attitudinal research was then added a number of other factors, including costs.

If the P.O. is now coming round to accept that sound-only teleconferencing could be a winner, it is not just because of these studies. The P.O. gave credit at last week's meeting to the impetus created by the Open University in particular. The OU has been using limited teleconferencing for several years, mainly for remedial teaching, but is now considering a far more ambitious nation-wide network, which would be of administrative use, and would allow tutors to discuss their problems far more often, as well as being used for courses with few pupils.

Marketing sensitivity

It would also enable the OU to offer short, updating courses under the "continuing education" banner, which requires a relatively informal approach: this is the purpose of a service operated by the University of Wisconsin with 25,000 students a year in 200 centres, and which has become an international model for teaching-by-telephone.

Apart from the pressure for facilities and equipment created by the OU another important factor in the P.O.'s growing warmth towards teleconferencing is a number of technical improvements, which will enable the P.O. to offer "cheap" products with a better technical performance than the current range of loudspeaking telephones. The P.O. will not commit itself on when these will be available, but promises that the development time will be much shorter than in the past.

If pressure groups such as the Confederation of British Industry and the Institute of Administrative Management had their way, the P.O.'s monopoly over subscribers' apparatus—including loudspeaking telephones—would be abolished on the U.S. pattern, immediately making many more designs available. But there seems little chance of their succeeding in the current political climate.

The P.O.'s new line brought praise from one expert at last week's meeting, on the ground that it had shown greater marketing sensitivity than the U.S. Bell System—which has a worldwide reputation for good telephone service. But there must still be some question whether all these studies and calculations will ever be turned into reality, simply because of human resistance to change.

The difficulty experienced in persuading people to use perfectly efficient teleconference facilities was amply illustrated at the meeting by Dr. Jake Muckersey, from ICI's central management services. ICI has installed links between six of its main U.K. sites, and another four (including Brussels) will be added by the end of the year. Trying to get people to use them was "like fighting a pillow," he said, but once someone used the system, "he'll almost certainly use it again."

Luckily for the scheme's proponents, it is so cheap that it is breaking even financially, even with less than one call per week per centre. But, seven months after the launch, it still has to fulfil its purpose of improving communications within the organisation.

The progress of ICI's system is being watched by many other large organisations which are concerned both with improving the quality of communication, and with cutting travel costs. In the U.S., and on the level of national policy, a Government-backed "Technology Assessment" on the subject is complete. It makes use of much of the British work to examine the potential implications of teleconferencing for office decentralisation and even working-from-home.

Summarising the assessment in a recent paper, a member of the Stanford Research Institute stressed that the underlying long-term trend in telephone costs was downwards (in spite of hiccups in the U.K. and elsewhere), whereas the reverse was true for transport. Advances in teleconferencing, together with further office automation, "may bring us closer to an era in which white collar work can be increasingly decentralised, and jobs can be brought to workers, rather than workers commuting to jobs." Such a trend would have a dramatic impact on the structure of industrialised society. It would be an opportunity or a threat, depending on your point of view. But it is no longer just a vague pipe-dream.

MEN AND MATTERS

To Russia for business

The last of Britain's big four banks starts business in Moscow next week when Midland opens its representative office there. Office isn't quite the right word because like Barclays, Natwest and Lloyds before them, Midland are having to start out in a hotel bedroom—at the Intourist just down the road from Red Square.

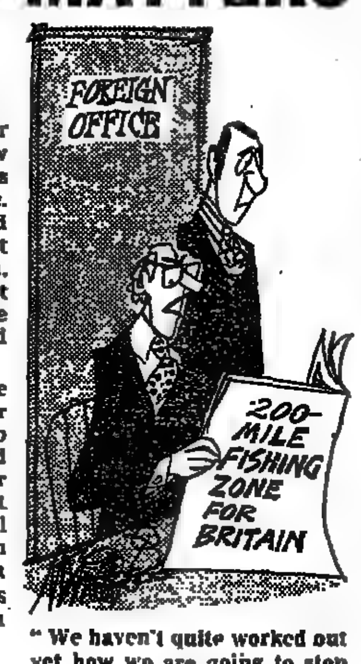
But the manager designate Frank Bicknell who leaves for Moscow this week-end isn't too worried. "We've been promised excellent accommodation higher up Gorky Street early next year," he said. And though he'll have to put his Hungarian-born wife and stepdaughter up in a hotel to start off with, there is also a flat lined up for them on Moscow's southern fringes.

Unlike many bankers in East-West finance who only got involved during the flood of Comecon loans during the last three or four years, Bicknell's experience with East Europe goes back 15 years, so he's better prepared than most for the task ahead.

He comes to the job on secondment from Midland and International Bank, the part Midland-owned consortium bank where he has been assistant general manager for the last two years. Before that he spent seven years running the East European side of the Lloyds Bank International foreign operations, having started out in East Europe as regional manager for Davy Ashmore back in 1962.

Bicknell will also be representing Samuel Montagu, which is 100 per cent. Midland owned. So on top of routine banking business, he expects to be doing merchant banking too, including bond issues, which is a strong feature of Montagu.

Midland's arrival in Moscow brings the number of Western banks there up to two dozen. And with 200 of the world's 400 largest companies also there, Bicknell believes Moscow is a place where anyone seriously interested in East-West trade should be. "It's not like the early days when people set themselves up there rather half-heartedly," he said. "It's got to the point where it's generating its own momentum."



"We haven't quite worked out yet how we are going to stop the French fishing in the Seine."

More ties

My note yesterday about Quarry Bank School in Liverpool and the aside by the new Transport Secretary William Rodgers that it could turn out to be the "Eton of the Labour Party" has prompted a swift response from Sir Daniel Pettit, chairman of the National Freight Corporation.

Rodgers, you may remember, pointed out that Environment Secretary Peter Shore was a prefect at the school while he was a fourth former. Pettit comes forward with a number of other public figures who attended the school (including himself although, as he points out, as chairman of a public enterprise he cannot subscribe to the political connotation either way).

To quote Sir Dan, "a quick survey of the public scene within my immediate ken would add David Basnett, General Secretary of the Amalgamated Union of General and Municipal Workers, a chairman of Honeywells, a chairman of Woolworths, a Brackenbury scholar, two leading musicians of international reputation, two distinguished university professors who are household names, and Derek Nimmo."

Sir Dan attributes the success of the school in its grammar school days to Richard Bailey—headmaster for over 25 years. Tradition has it that Bailey was in fact second choice when the school opened in 1921 but the first choice, it turned out, had offered false credentials and was unmasked before he was awarded the job.

To the lasses

Here is an off-beat tale to make salesmen look over their shoulders. It involves a private company making tractor spares, its export business, its managing director, and his secretary.

The company is Sparex an Exeter-based private group which has aspirations to go public in the next couple of years if market conditions should prove suitable. The managing director is Malcolm Brook and his secretary is Mrs. Elizabeth Tyzack, 26 years old and nothing to do with the management consultancy firm.

Sparex does some £1m. a year turnover in direct exports from the U.K., selling to some 50 countries. There are five staff members who do the export selling—including Brook himself. Just recently Brook was booked for a five-day tour of Belgium and Holland, while the other four export salesmen were abroad.

At the last minute other business commitments prevented Brook from going on his scheduled trip and, rather than cancel it, he decided to send Mrs. Tyzack—who is fluent in both French and German. In a world that is still predominantly male chauvinist Mrs. Tyzack surprised everyone: she has just returned, and, in the short space of five days she not only produced firm orders worth £7,000, but also opened up two new export accounts for the company off her own bat.

A delighted Malcolm Brook commented yesterday, "Orders of £7,000 may not sound much compared with our total export turnover, but the market concerned is relatively small. Anyway, in potential terms the opening of new accounts is far more important, and I'm sure I couldn't have done any better myself."

I imagine that many company directors reading this will not thank me for publishing it. But it does add some weight to the often-heard grouse from secretaries that their talents are not fully exploited.

Clear thinking

The mixed metaphor is something of a risk to anyone in the journalistic profession, but how many people can match the following extract from a company staff magazine? "He said that trying to put the social club on a sound financial footing was like flogging a dead horse. The committee had laid their cards on the table and asked members to put their shoulders to the wheel, but their appeal had fallen on deaf ears that were only interested in cheap drink and bingo." Well at least the writer makes his point.

Observer

FINANCIAL TIMES SURVEY

Wednesday September 22 1976

Machine Tools

Few industries can have received the close attention which the machine tools sector has been given over the last 12 months. It is now starting to recover from the worst recession it has known.

INTERNATIONAL EXHIBITION OF MACHINE TOOLS
MACH 76
22 September–2 October 1976

HARTLE
Machinery International Ltd

NOW FOR INDUSTRIAL EXPANSION

Modern British management realises that if it is to maintain a position with other leading industrial countries, it is imperative that factories are maintained with up-to-date machinery. Consequent to the past two years depression within industry, the updating of our factories with machine tools is now required, if we are to keep ahead.

Far seeing managers have already made their decisions for the purchase of replacement and additional equipment and are in the process of implementing those decisions. Other managers will have no alternative but to follow suit, or be left by the wayside. Traditionally, the British have not been left by the wayside, and I do not anticipate that now we shall be left behind. That is why I anticipate industrial expansion to a considerable extent in the immediate future.

The Hartle Group

xander Machinery dley) Ltd.

cialists in both powered hacksaws bandsaws Alexander Machinery d the Hartle Group in 1971 to form nucleus of one of the most successful manufacturing divisions in the world. ddition to the renowned 'Rapidor' 'Midsaw' horizontal and vertical es the company also produce the Ton' range of hydraulic presses and well-known Hydus range of saw es.

kworthie Machine Tools ited, Kenilworth.

ative newcomer to the Hartle Group, vorthie Machine Tools complement turning division with a series of matic chucking lathes and the multi-on Vertomat rotary transfer ma-es. They also manufacture a com-ensive range of drilling and tapping chments.

adbent Machine Tools Ltd, lifax.

founder member of the Hartle up's turning division, Broadbent hine Tools manufacture an out-ding series of long bed lathes with e distances up to 10M, and swing cities up to 2100mm. Their hollow dle models, known as the 'Oil ntry' lathe are designed for oil and xploration drill tube machining and ble to handle workpieces up to 15 bore.

nley Machine Tool Company , Halifax.

ming members of the Hartle Group 971, Stanley Machine Tools added deep hole boring and smaller bore ow spindle lathes to the wide range production and toolroom models ady imported by the distribution ion and to the automatic lathes now ufactured within the group. The hole' boring units handle depths o 100 inches from 0.8 to 2.4 inches ameter.

alters & Smith Brothers , Barnsley.

lters & Smith of Barnsley have made Group's sawing division the largest ufacturer of powered saws in Europe. r Sawmaster range of powered saws and bandsaws complements the p's existing products and their range of l and column drills is enhanced by distribution division's imported units.

rtle-Stedall Ltd, nchester.

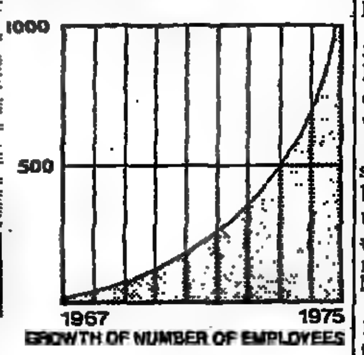
only non-manufacturing member of Hartle Group, Hartle-Stedall are ponsible for the distribution of a wide ge of imported turning, drilling, and ding equipment together with a sub-ntial turnover of high quality used hine tools. The company maintain e depots in the U.K. and are main nts for Soviet, Italian, Rumanian and ngarian machine tools.

addition an extensive range of presses, s brakes, guillotines, and Digep nterhiow Forging Hammers (max. acity 3,200M.K.P.) are available through ncroft of Birmingham.

"Since its formation, this group has a record of dynamic growth both in the U.K. and Europe" Derek Hartle, J.P., Chairman.

Increased work force

The consistent upward curve of the graph clearly illustrates the increase in the number of people employed within the Hartle Machinery International Group of Companies during the period between 1967 and 1975. This gives a clear indication *of the many opportunities for both technical* and commercial personnel constantly occurring as the Hartle Group continues expanding and indicates their acceptance of social responsibilities.



There's money on tap to keep production flowing

Hartle Machinery International assure industry that now is the time to re-equip and modernise by taking advantage of bank borrowing, hire purchase and leasing schemes.

Inflation, cash flow problems and economic recession can all be different symptoms of the same thing — lack of *confidence. And the only lasting cure for* that is commercial expertise and greater professionalism.

Every production engineer is expected to know manufacturing inside out, but real expertise is also dependent upon an understanding of the way his company attracts and uses resources to generate profits. In any business, success depends on the ability to manage the use of finance in the most effective and efficient way—to increase output, to reduce costs, to achieve higher sales, to improve profit margins or to deploy capital resources more economically.

Regrettably, the value of capital equipment per worker is lower in the U.K. than for any of our overseas competitors. The need for new plant and machinery is clear. And yet businessmen in all sectors of industry are faced with a major investment dilemma. Every large cash outlay appears either to dilute reserves of capital or divert long-term investments.

Credit finance is now recognised as a vital element in everyday business management because it solves this dilemma. Leasing and hire purchase protect both cash flow and increased profit earnings. Discounts, grants, part-exchange allowances and entitlement to tax reliefs are all safeguarded. Indeed, even the largest international companies prefer to use credit finance rather than deplete their capital resources unnecessarily by purchasing outright. By this method new machines pay for themselves out of the extra profits they generate and, most important of all, it enables companies to acquire machine tools that would normally fall outside the scope of their capital budget.

With prices rising steadily, to delay purchasing new equipment until cash is available is as outdated as harvesting by hand. In contrast, the repayments made by the customer become progressively cheaper in real terms as they become eroded by inflation.

Hartle Machinery International have become increasingly aware of the need to concern itself with contributing to its customer's success and not just offering a good product. Being an order-taker is not enough in harsh economic conditions. In conjunction with the Industrial Bank of Scotland Ltd, a member of the Bank of Scotland Group, they have developed a special Finance Complemented Service for its machine tool customers.

When British industry begins to take full advantage of this kind of professionalism and expertise it will undertake the vital re-equipment programme which is needed to turn economic recession into recovery.

This is a shortened version of an article published in Metalworking Production.

Our new symbol

Our new symbol in the group colours of blue and gold will be used for the first time on Mach '76 publicity material. The device will ultimately appear on all sales literature, advertising, stationery, and outdoor signs of group member companies.

FIFTY MACHINES ON SHOW AT MACH 76
see them on STAND 5.107/5.133

Hartle Machinery International, described by Chairman Derek Hartle as the best co-ordinated machine tool manufacturing and distributing operation in the U.K., has fifty products on show at the great International Machine Tool Exhibition Mach '76 staged at Britain's splendid new National Exhibition Centre at Birmingham, from 22nd September to 2nd October.

Stand 5.107/5.133 will show machines both manufactured in the group and from overseas for turning, boring, grinding, drilling, sawing and sheet-metalworking operations.

Manufactured within the group, the Broadbent 'Oil Country' lathe with automatic-cycle screwing is especially suitable for the machining of oil exploration equipment, combining large capacity hollow spindle, long bed and more than ample cutting power.

Stanley will introduce their new range of large bore hollow spindle lathes and their renowned auto cycle deep hole boring and drilling machine with increased capacity to 100mm.

Also in the turning and boring section is the model 1512 vertical boring and turning mill produced in the Soviet Union by the manufacturer of the world's largest boring mills exported by V.O. Stankoimport Moscow.

On display and identified as model 16K30 F.306.N.C. is a new lathe fitted with A.S.E.A. Swedish numerical control.

The stand will carry a representative selection of grinders available from the Distribution Division. This covers universal cylindrical, plain cylindrical, centreless and surface grinders, capable of handling most grinding applications.

As well as being main U.K. distributor for V.O. Stankoimport of Moscow, Hartle-Stedall are also main *distributor for Technoimpex of* Hungary.

Their radial drill range includes a model with a capacity of 100mm in. steel, in addition to 50 and 75mm units.

The Qualters and Smith range of drills include radials, bench, pillar and box column precision drilling machines.

Vertomat rotary transfer machines from Ackworthie are available for first or secondary machining, including turning, drilling, reaming, counter-sinking, recessing, facing, slotting and light milling.

The combined manufacturing resources of Qualters and Smith and Alexander—both Group members—produce the widest range of hacksaws, bandsaws and power saws in Europe and probably the biggest sales volume.

For Mach '76 they are showing the QSH6 and QSH8 heavy duty hacksaws, incorporating two-speed drive and variable hydraulic feed and relief mechanism.

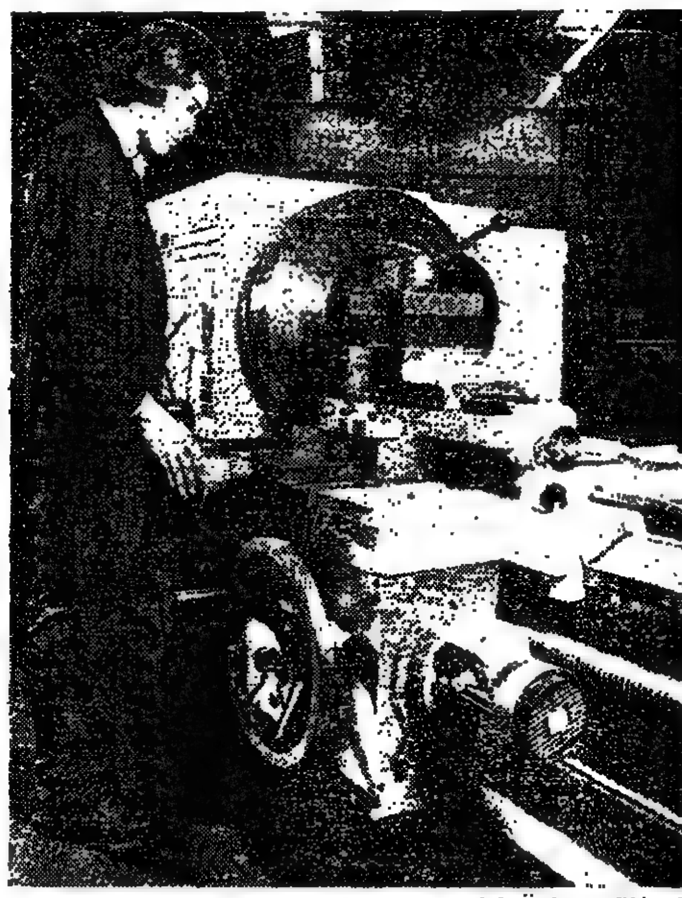
New from Alexander is the T.315 high production heavy-duty power saw, with automatic bar feed and a number of other features such as a centre cut vice for burr-free cutting, outstanding performance with 1½in. wide B1 metal or HSS bandsaw blades and bar feed index length repeatability better than :0.005in. (0.13mm) and digital micrometer index length adjuster for 'right first time' settings.

Other products include 'Rapidor' power saws and the new 'Midsaw' 500 series bandsawing machines, providing large capacity sawing and a wide speed range at low cost.

For the sheet metalworking industry, the Group is showing the Digep open fronted press range, which can also be used for punching and deep drawing with a wide range of equipment available.

The Gefi LE 100–3000 press brake, designed to absorb stresses and strains so that special foundations *are not necessary, can produce over* forty different shapes.

In all Hartle Machinery International will be showing one of the most comprehensive selections at Mach '76 in line with their progressive policy, which includes a design and development programme to ensure product advancement in keeping with technological progress.



This is the top-selling 'Oil Country' lathe from Broadbent Machine Tools Ltd., one of a range of high quality centre lathes. It combines large hollow spindle capacities and bed length to suit individual requirements – plus more than ample cutting power, making it particularly useful for the machining of A.P.I. pipe line joints and other processing equipment allied to the petro-chemical industries.

When you choose Hartle Machinery International for your machine tools you know you're going to get exactly what you want.
One reason for this is that we are one of Europe's leading suppliers of machine tools with seven manufacturing companies and a distribution division with ten European showrooms. This means that we can offer you a real choice.
We supply machines from the world's leading manufacturers. Vertical boring and turning mills, radial drills, surface grinders, tool and cutter grinders and of course lathes of all sizes and types, and are Europes largest manufacturer of metal sawing machines.
Our range includes the latest and finest machines from Britain, the Soviet Union and Eastern Europe – now among the quality leaders in machine tools, and certainly offering unbeatable value for money.
Hartle Machinery International score in another big way. We can deliver most machines within a week or two of receiving your order.
But it's not just products we bring you. It's expertise.
Every machine is backed by our skilled technical service and thoroughly checked and tested before delivery to you.

Hartle
Machinery International Limited,
Bank House, Charlotte Street, Manchester, M1 4ET

Manufacturing Division Ackworthie Machine Tools Ltd, Kenilworth • Alexander Machinery (Dudley) Ltd, Dudley • Broadbent Machine Tools Ltd, Halifax • Qualters & Smith Bros. Ltd, Barnsley • Stanley Machine Tool Co. Ltd, Halifax
Distribution Division Hartle-Stedall Ltd, Manchester

Keeping the Government on its toes

THE MACHINE tool sector has been selected as one of the 38 key industries to be examined by the National Economic Development Office as part of the Government's new industrial strategy which aims to switch more of the country's available resources to manufacturing.

It has been offered Government financial help via an industry aid scheme in which £20m. of relatively cheap money has been allocated to help manufacturers to get their plants modernised and more efficient as well as to encourage the faster introduction of machines incorporating new technology.

It has been one of the first industries which the National Enterprise Board has tried to help out in its merchant banking role. The NEB is providing cash at commercial interest rates but with deferred payment terms to help companies stockpile machines until the recession finally recedes.

You might say that all this is very flattering for an industry which is comparatively small—250 companies with 63,000 employees and a turnover of about £380m. if you take component manufacturers into the total. It justifies the view of the industry put forward by the Machine Tool Trades Association which recently informed a Parliamentary Committee that:

"The machine tool industry in the U.K., though small in manpower or turnover, is agreed by all to be an important if not vital part of the mechanical engineering sector, which itself is the main wealth-producing sector of British industry. The importance of the strategic and economic roles of the machine tool industry cannot be overstated."

The problem for the industry, however, is that its importance to the economy makes the government edgy at any time something goes wrong. Consequently attention is constantly focused on the troubles and failures in the industry rather than on the many success stories.

So it comes as a great surprise to many people to hear someone like Mr. Anthony Frodsham, an "outsider" who came to know the machine tool business when he was appointed chairman of the Machine Tool Economic Development Committee three years ago, say "It is a very good and very successful industry which exports well and has a reputation for first-class design. For many companies it is a good industry to be in."

The industry as a whole, he believes, "has been affected by the adverse publicity given to one or two large companies."

And it is quite true that for some people Alfred Herbert is representative of the U.K. machine tool business in general. The much-publicised problems of this particular group have tarnished the "image" of the industry at large.

Fortunately things are changing rapidly at Herbert and at the other companies which once made up the machine tool industry flight of lame ducks.

Efficient

Herbert now has the financial resources, the tough and efficient management team and determined and co-operative workforce it has long needed. Admittedly, it required a Government rescue operation to put Herbert into that condition. But now the company could be in the black once more by the end of the year, given a reasonable flow of orders.

Also in the past year, Kearney and Trecker Marwin, considered by many to be the key British-owned business at the high-technology end of the industry, had its future satisfactorily resolved when it came under the wing of the Vickers engineering group. Once again, the prospects are for a fairly swift return to profit-making and, in the longer term, a reasonable return on capital.

With Staveley Industries, once in dire straits, sorted out some time ago by a new management team, the critics are going to have a hard time in future to find one outstanding "problem" company to quote as an example to justify any condemnation of the industry in general.

That is not to say that the industry is without problems. The machine tool EDC, "the Little Neddy," found quite a few when carrying out its part of the initial stages of the industrial strategy exercise. It should be emphasised again, however, that the objective was to search out the problems and that a recital of what was discovered quite naturally gives a one-sided and depressing picture of the industry. It was not part of the Little Neddy's job to list the industry's virtues.

The EDC found that real levels of machine tool demand and production in the U.K. fell during the past decade although world output rose. In terms of U.S. dollars world output has been rising at an average of about 11 per cent. a year whereas U.K. output has risen only 2.5 per cent.

From 1966 to 1971 the U.K. industry held a 7 or 8 per cent. share of world exports; this fell to 5 per cent. in 1974 and 6 per cent. in 1975. Import penetration in the domestic market has increased from 25-30 per cent. in the late 1960s to well over 40 per cent. now, but this has been accompanied by a similar increase in exports from home production and a favourable trade balance has been maintained.

In the 1960s the industry invested a higher proportion of value added and larger amounts per employee than the average for mechanical engineering as a whole. In the early 1970s this situation has been reversed.

Employment in the industry reached almost 90,000 between 1965 and 1970 but fell sharply in the 1971 recession to reach 65,000 in 1973, 66,000 in 1975 and 63,000 in January this year.

Profitability has been poor in comparison with mechanical engineering or with other sectors of the economy. Because of the low level of activity in this current recession, companies have few immediate cash problems. This will crop up again when activity has to be stepped up.

The Little Neddy indicated four types of constraints which might limit the industry's response to the expected demand upturn—expected, that is, next year with a peak in 1977-78. These were: (a) limited plant capacity in the industry itself; (b) manpower shortages; (c) supplies of raw materials or components and (d) finance.

It was pointed out that the industry could probably respond to a rise of about 70 per cent. in its order input rate before meeting major capacity problems. However, at the last demand peak—in 1973 and early 1974—order input was 130 per cent. above the present level.

The EDC insisted that the demand cycle, which saps the strength and confidence of the industry during a recession and leaves it weak to meet the following upturn, constitutes the most serious constraint on the industry's performance.

Many other problems are linked with this. Such as the lack of funds for capital investment and working capital which limits the industry's ability to strengthen itself by re-equipment and to take full advantage of cyclical upturns in demand for its products.

Or the fact that research and development expenditure has fallen by a disturbing amount—in 1972 the industry spent only one-fifth, in real terms, of its 1966 expenditure.

Linked with this is the fact that the product types in which the U.K. industry is most competitive are often those for which demand has been declining, or growing only slowly. In the faster growing types the U.K. appears to be less competitive.

Foremost among the Little Neddy's recommendations for action on these problems was a suggestion that the Government hurries ahead with counter-cyclical measures. The EDC would like to see the introduction of an investment reserve scheme which would encourage manufacturing industry to invest during the recessions and discourage them from buying capital equipment during peaks in demand.

Such a scheme would only reduce—not eliminate—cyclical fluctuations and therefore it is suggested that stockbuilding on the lines of the previously-mentioned National Enterprise Board scheme should be considered in future recessions.

The EDC called for closer relationships between the banks and machine tool company managements. Banks and other financial institutions should reconsider their criteria for assessment of medium and long term loan applications from manufacturing companies, it suggested. In particular, higher gearing ratios might be accepted and greater weight given to assessment of future prospects than of past performance.

Opportunities

The banks should also appreciate the industry's special fluctuating need for working capital to take advantage of cyclical profit opportunities.

The Little Neddy said that machine tool managements should place greater emphasis on world-wide market research for existing products and for potential new ones. As the U.K. industry has been forced to contract so rapidly in the last six years, there may now be market sectors which are no longer adequately supplied by U.K. manufacturers and such gaps might provide opportunities for the industry to rebuild its strength — either by developing suitable products or by taking licences for foreign designs.

It was pointed out that improvements to the industry's image held by domestic customers are needed in the fields of detail design, quality, delivery and service. Manufacturers need to re-examine their performance in these areas and take steps to rectify weaknesses and to publicise their strengths.

The industry must concentrate on products which incorporate a substantial degree of technology in their design or manufacture, insisted the EDC. These products will have a high value in relation to their raw material content and can be expected to become increasingly important as user industries improved their own manufacturing processes.

And a higher level of investment is needed in numerically controlled and other types of machines which can improve the machine tool industry's own production efficiency and flexibility as well as meeting the higher precision requirements associated with higher value products.

Existing equipment can also be made better use of through greater production engineering and quality control effort; through improved production control procedures and by designing products for ease of manufacture.

In this connection, the Little Neddy, which includes trade union representatives, recognised that if potential productivity gains from new investment in production equipment are to be fully realised, careful collaboration between management and unions will be needed to gain acceptance of change in manning levels and skil[l] required. Unions will need t[o] take a positive role in ove[r]coming natural resistance [to] change among their membe[r]ships.

That is why the Governme[nt] is insisting that the messag[e] from these industrial strateg[y] preliminary exercises are tak[en] right out on to the shop floor, because there is as much [to] be achieved there as in th[e] Boardroom.

The idea is that sectors li[ke] the machine tool industry shou[ld] recognise their problems a[nd] that the solutions should co[me] from within the industry rath[er] than there be any attempt [to] impose them from above [in] some kind of "national econom[ic] plan." By this time next ye[ar] we will have a better indicati[on] of whether this approach w[ill] work. If it does, it could he[lp] the U.K. machine tool industr[y] strengthen itself considerably [in] the longer term.

Kenneth Goodin[g]

Two important changes in the industry's structure

SINCE THE 1960s when the urge to merge became a fever throughout U.K. industry — a phenomenon which did not leave the machine tool industry untouched — the structure of this particular sector has remained pretty stable. There were, however, two significant happenings in the past few months, but just how significant only time will tell.

The most recent of these was when the giant Vickers combine (sales £325m., taxable profits £25m.) moved into the machine tool industry via the acquisition of a majority stake in Kearney and Trecker Marwin.

KTM is second only to the U.S.-owned Cincinnati Milacron as a maker of numerically controlled machine tools and is this country's biggest supplier of special machines. Probably 40 per cent. of the "specials" used in the British motor industry to make crankshafts, cylinder blocks and cylinder heads were provided by KTM. It should therefore have a vital role to play in the investment programme of Leyland's bus and truck division.

On top of that, KTM exports about half its turnover — in the region of £13m. last year — and is generally thought of as providing Britain with its most important foothold in the high technology part of the machine tool business.

So it is easy to understand why the Government was so interested in saving the company after it accumulated losses of £6.8m. and ran out of capital. But the method of saving KTM "*for the nation*" is perhaps not so easy to comprehend. Why not, as with Alfred Herbert, simply steer the company in the direction of the National Enterprise Board? The answer is simply that the Government and the NEB can certainly provide cash. But they cannot supply management resources. And what KTM required was people to strengthen its management team as well as an injection of new money.

Vickers has both cash and management to contribute. KTM also benefits from the technology provided by its now minority shareholder, Kearney and Trecker Corporation of the U.S.

The Government, or the Department of Industry to be more precise, was so impressed by this combination that it was willing to write off nearly £5m. already invested in KTM and *to inject a further £1.9m. of* badly-needed working capital.

So, when the 1,200 KTM employees returned to work at the Brighton factory after the summer holiday break last month, they found themselves "under new management."

We know more than usual about this particular Vickers' venture thanks to a week-long court case which preceeded the final takeover and which took place because one of the previous KTM shareholders objected to the terms offered. It became clear at the hearing that the top management at Vickers was by no means enthusiastic about getting involved with KTM.

But now the deed is done the obvious question is whether Vickers might increase its interest in the machine tool sector. After all, Vickers will have a great deal of cash to spend after its shipbuilding and aircraft operations are nationalised.

Indications

The indications are that Vickers would have shown no interest at all in KTM if it had not been involved in at least highish technology. There seems to be no chance that Vickers would want to acquire any old machine tool businesses. However it could well be interested in one where the cash required, the technology involved, the risks and the rewards were all very high.

In the meantime, KTM is back in the "black" and is celebrating the successful launch of a completly new computer controlled machining centre.

The other important change in the industry's structure during the past year was the formal takeover of the aforementioned Alfred Herbert by the National Enterprise Board. Although this was a solution to the group's problems that not everyone in the industry heartily approved, the industry did breath a sigh of relief that this company—so well known and respected throughout the world—had at last escaped the threat of total extinction.

It is generally agreed among its competitors that Herbert, with Mr. John Buckley as chairman and Mr. Walter Lees as managing director, now has one of the strongest management teams in the business.

And, despite the recession, Herbert achieved markedly better financial results in the first half of this year, cutting the loss after tax from £3.5m. to £1.28m. on turnover up from £20.4m. to £23.7m. Given a reasonable flow of orders the company should be making profits by the end of 1976.

It cost the Government £25m. to save Herbert and, while most people seem to agree it was necessary for Britain to have KTM, not everyone believes that the money was well-spent as far as Herbert was concerned.

Victims

With Herbert among its interests, the NEB will almost certainly consider further expansion into the machine tool sector. This is not a prospect which seems to please the managements of the private-sector companies and has certainly contributed to the comparative failure of the Government's industry aid scheme and the NEB's funds-for-stockbuilding project. Machine tool people are apprehensive of taking any State cash in case they become what they would call "victims" of Sir Don Ryder's expansionist plans.

As it happens, the industry does seem to have come through the worse recession in living memory without serious casualties. There are no signs that any company has got into such bad difficulties that it must turn to the Government for help, a move which would almost certainly lead to it being steered towards the NEB's parlour.

There seems to be no other reason why the NEB should get more deeply involved in the industry. As the recent NEDC industrial strategy paper made clear, "scope for mergers in the industry is not thought to be great." But one sector — gear production machines — was identified and others such as presses and certain types of grinding machine "warrant further examination."

The machine tool industry in Britain evolved from a large number of small family companies and the present structure reflects this fact. There are about 250 companies manufacturing machine tools or components for them as their primary business. The pattern is similar among the U.K.'s major competitors and the average size of companies is not significantly different in the U.S. or West Germany, for example.

The major restructuring in the later part of the 1960s did produce some larger units, however, so that to-day seven large groups account for around 35 per cent. of machine tool sales and export production.

These are, in strictly alphabetical order: John Brown, which through Wickman and its subsidiaries last year had machine tool manufacturing turnover of £55m. and profits of £770,000.

Cincinnati Milacron, owned by the American group of the same name but which has been operating in the U.K. since 1934. CM accounts for about one quarter of the numerically controlled machine tools made in Britain and for more than one third of those exported. Sales top the £25m. mark.

B. Elliott, which takes in Butler Machine Tool and Snow and Co., as well as Elliott Machine Tools. Elliott has diversified into other activities while cutting back on its machine tool operations for which it gives no separate statistics. The group as a whole last year had a turnover of £46.3m. and profits of £3.23m.

Alfred Herbert is among the "big seven" as is Staveley Industries, another group which at one time gave cause for concern. Staveley's machine tool manufacturing companies are now in fine fettle — they are Asquith, Drummond, Kearns-Richard and Staveley-Lapointe. The company's so-called "machine tool" division should really be called a "mechanical engineering" division, so it is difficult to isolate just how much of Staveley's £81m. turnover and £3.6m. profit in the 1975-76 financial year actually came from the machine tool operations.

The 600 Group, which now insists it is "the U.K.'s largest maker of machine tools" and takes in such well-known names as Colchester Lathe, W. E. Sykes, F. J. Edwards and so on. Last year the group's machine tool division made profits of £3.9m. on a £48.5m. turnover.

Tube Investments' "machi[ne] division," which the group sa[ys] is "one of the largest machi[ne] tool, machinery and associat[ed] equipment organisations [in] Europe," has Matrix a[nd] Charles Churchill among [its] best-known businesses. T[he] machine division made profits [of] £2.5m. (before loan interest) [on] a turnover of £44.5m. l[ast] financial year.

Among the successful medi[um] sized concerns is Hart[le] Machinery International whi[ch] includes such names as A[...]worthie, Alexander Machine[ry], Broadbent, Qualters and Smi[th] Bros. and Stanley Machine To[ols] within its operations. Its d[is]tribution division, headed [by] Hartle-Stedall, claims to [be] "one of the largest machi[ne] distribution businesses in [the] U.K. Hartle's turnover last ye[ar] was £8.5m. and profits £270,0[00].

This makes it somewh[at] smaller than Wadkin, be[st] known for its woodworki[ng] machinery, which had a tu[rn]over of £13.4m. and profits [of] £1.6m. Another "quoted" company in the sector, A. [...] Jones and Shipman, ma[de] profits of £1.8m. on a turnov[er] of £10.7m. Adcock-Shipley, no[w] part of the Textron co[n]glomerate and therefore Ame[ri]can-owned, must be about t[he] same size as Hartle but separa[te] statistics are not published.

Kenneth Goodin[g]

Boosting the aid scheme

ːNG the next few weeks Brown, a former Minister ate at the Department of stry, will be calling to see management teams at a ıer of smaller machine companies. His objective be to get them interested ıe Government's machine ıid scheme and to clear up misunderstandings they t have about it. Lord n is mainly employed as a ıltant these days but among ıther commitments is the manship of the Depart-'s advisory board for the ıine tool scheme.

this capacity he will, as he it, "be knocking on :" to tell people about the ne and to answer questions t it.

ls is all part of a mined campaign by the rtment of Industry to make the aid scheme ends, if not blaze of glory, at least with le more spark than it pro-l in the first year of ıtion.

ıanges

'Ve want to help this stry into growth markets growth prospects," declared Peter Carey, Permanent etary to the Department of stry, last month when ducing some significant ges to the scheme. He ted that "this is an rtant aspect of the new strial strategy and these ges underline the Govern-t's commitment to the egy."

ırd Brown's travels are just indication of the drive to the scheme into a success ;. And the fact that £20m. public money has been ated to the machine tool stry shows that the Govern-t certainly needs no ıncing about the importance this sector. That £20m. is a ısierable sum, particularly en measured against the 30m annual turnover of this ıpaatively small industry.

Yet in its first year of eratin—up to August—the l sceme produced a dis-pointng response. Only nine ojects were approved, volvin assistance of nearly m. towards a total investment the cbmpanies concerned of 0m.

This was the poorest response the Department met from the industries involved in the four aid schemes operating that year.

And it was not just that the number of applications was low and that they were slow to arrive. The quality of the projects put up for consideration also left much to be desired. The Department would have liked to have seen, for example, more machine tool companies asking for cash to help launch new products. Instead it was invited to consider frankly pedestrian projects involving no real change of direction for the companies which applied.

The machine tool manufacturers argue that this was mainly because the Department did not do enough to "sell" the scheme to the industry. Perhaps it was a reaction to this criticism which produced last month's big publicity campaign by the Department—the changes to the scheme were certainly given a much better send-off than the original scheme itself—and the aforementioned trip by Lord Brown.

There was also the fact that industrialists in all sectors of manufacturing industry — the machine tool makers among them—are frankly suspicious of the motives of any Labour Government offering "help" to private industry. The reaction of many managers is to steer clear of any involvement at all with a Government department. The idea that the industry aid schemes were one way of wedging the door ajar so that the Government could push in with interventionist policies at a later date is widespread still.

Lord Brown hopes that he can quiet the fears of machine tool company managements who feel this way.

Another important factor behind the poor response was that the machine tool industry has been actively canvassing for Government help—but help of another kind. It is a major sufferer from the fluctuations of the cycle of demand and has been pressing the Government to do something—in the way of a counter-cyclical scheme — to alleviate this problem. Instead it was presented with the aid scheme.

Ironically, it was because the Government recognises that the machine tool industry has been hit so hard by the demand cycle, which has damaged its ability to invest and to retain the skilled people it needs, that the industry was chosen as a proper candidate for an aid scheme in the first place.

The Government has been convinced that the machine tool industry is vitally important to the U.K. economy and recognises the benefits manufacturing industry as a whole would gain from Britain having a technological lead in machine tools.

So the machine tool aid scheme was aimed particularly at encouraging the launch of new products, the modernisation of plant and buildings and the general all-round improvement in the industry's efficiency and competitiveness.

That might be so, the machine tool makers reply, but they point out that several companies had their proposals turned down flat. And that kind of news gets around to discourage the others.

Dr. Adolph Frankel, chairman and chief executive of Staveley Industries, one of the first recipients of aid scheme cash, points out, too, that only companies of a fair size could expect to have the staff available to handle the detailed questions the department needs to have answered and to develop a "project" of the type required in the first place. (It is only right that the Department should try to make sure that public money is put to the best use but there is often a natural disappointment at the companies when they see the numbers and depth of the questions they are expected to cope with when making an application.)

Limits

And the changes announced for the scheme last month are specifically aimed at encouraging smaller companies to show more interest. The eligibility limits have been lowered so that projects involving a company in an outlay of £25,000 for modernisation, rationalisation or expansion of capacity will now be considered. Previously there was a £50,000 lower limit.

The eligibility level for project development schemes has also been halved, from £100,000 to £50,000.

The form of assistance for schemes for the design, development and launching of new machine tools was changed to a straightforward grant of 25 per cent. of eligible costs — something the smaller company can more easily understand than the previously rather complex formula.

(In this context it must be remembered that some very small—in turnover and volume terms — companies in the U.K. have developed machine tools which became world leaders in their particular sphere.)

The changes also introduced a grant of 50 per cent. of approved consultancy fees for "small and medium-sized" companies which employ consultants "to investigate problems and to formulate proposals for improving the concern's productivity and efficiency."

This is similar to a provision in the textile industry aid scheme and is designed to help those managements burdened with questions of immediate survival to obtain some outside help to look a little further into the future.

The Department, however, resisted any temptation to offer money more cheaply.

The Department is sure that the more the companies themselves contribute, the more chance there is of the proposals they put up being worth while. The present rate of relief is judged to be about right enough to stimulate new investment but leaving enough for the companies themselves to find.

Neither has it proved possible to lower the eligibility limits further in the search to help more small companies. The feeling is that the new lower limits set do not represent particularly large amounts even for small companies. Then there are the administrative problems which would arise if the Department tried to process a large number of very small projects.

There is still time for companies to come forward. Applications must be submitted by December 31 this year, though, and the projects must be completed by the end of August 1978, or in the case of new project development, by August 1980. The Department's regional offices will deal with inquiries about the scheme and, in the words of Sir Peter Carey, "It costs nothing to discuss ideas with the Department. Anyone can go along to their local regional office and see if there is anything the aid schemes have to offer his company."

Kenneth Gooding

Exports show good growth

ONE OF the country's key indicators of economic activity is the sales of machine tools, and with the current emphasis on a export - led economic recovery the industry's performance in overseas markets is of great significance.

Latest figures suggest that, despite the continuing slowness of the home market, exports are growing faster than imports; in the first seven months of this year they passed the £113m. mark. The balance of trade in machine tools at the end of July stood at £35.8m., compared with £24.8m. a year earlier.

Recent Government statistics show that the value of exports has grown by more than 16 per cent. this year, while imports have risen by only 10 per cent. in comparison, although this may still be distorted by inflation and not be quite so favourable when seen in unit terms. Nevertheless, the Machine Tools' Trade Association is confident that last year's performance will be easily improved upon.

Considerable activity continues on the part of the Machine Tools' Trade Association to boost exports, and it has undertaken a major publicity campaign in more than 30 countries in connection with the International Exhibition of Machine Tool Gauges and Tooling in Birmingham. This is seen as another way of reaching the export markets which are so important to the industry's recovery from the recession.

Narrowed

The U.S. remains the British industry's major market, with goods worth nearly £18m sold there last year, but their predominance, which existed in 1974 has been narrowed and South Africa (£13.5m. in exports last year) and Poland (£11.1m.) follow not far behind.

They are followed by France and Spain, with purchases of about £8.5m. each, West Germany with £8.2m., Brazil £7m., Sweden £6.8m., Australia £6.3m., the Soviet Union £5.9m., Canada £5.7m. and Italy £5m. The Italian market is notable in that it has dropped from Britain's third largest market in 1974 to 12th position in the league table, although the actual value of exports has fallen by only £1.6m.

Unlike other industries, Europe is not apparently gaining much ground in terms of exports, which is possibly borne out by the recent findings of the European Committee for the Co-operation of the Machine Tool Industries. These were that unless there was a flow of firm orders in Europe soon, the Community's industry could contract substantially.

It was pointed out that there have been a fair amount of bankruptcies and closures recently. But in the longer term it is clear to European manufacturers that CECIMO's most important role is that of assisting in the removal of unnecessary barriers to trade, such as national safety obligations and noise control regulations. Though these may seem minor matters, their importance in overall trade and further steps should not be underestimated.

Perhaps the best indication of the size of world markets and Britain's position within them is illustrated by the fact that in 1974 West Germany produced machine tools worth $2.7bn., followed by the U.S. with $2.1bn. and the Soviet Union with $1.8bn. Britain and France each produced machine tools worth about $600m.

The Soviet Union was the world's largest importer, followed by France, Poland and the U.S., which bought machine tools worth $258m. in that year. In exports, West Germany is dominant, selling goods worth nearly $2bn., or more than four times the value of those sold by its nearest competitor, the U.S. In the year Britain sold goods worth about $150m., as did France.

As far as the U.K. is concerned the recession in West Germany has had damaging effects and caused some decline in its purchases, and sales to the Soviet Union have fallen from the levels of 1972 and 1973. British exports as a percentage of deliveries expanded in the late 1960s to around 50 per cent. in 1971, and although the ratio fell back during 1972-73, it is now recovering, according to industry sources.

Machines for grinding, turning and "other metal forming" have shown the best growth in recent years, with unit and transfer machines, milling machines and hydraulic presses also showing an upward trend during the current year. It is reliably predicted that the downward cycle of declining sales, new orders and order books will continue until about the end of the year, by which time there should be signs of further recovery in overseas markets as well as improved confidence in the U.K.

It appears likely that the recovery in export orders will be ahead of the home market, but this is not regarded as certain because the investment cycle, both at home and abroad, tends to lag behind the cyclical changes in general economic growth. If the upturn in home and overseas markets do coincide in broad terms, there is a danger that the cyclical problems experienced in the past will recur.

Should this happen, despite the strong growth in demand in prospect for the years 1977 and 1978, given the present and expected capacity in the industry, the peak of the next cycle in or around 1979 may be only slightly higher than that achieved in 1974, according to industry estimates.

Exports remain the dominant factor in overall demand for metal working machine tools, and in the past four years have averaged 44 per cent. of total sales. Assuming that price competitiveness will be broadly maintained at its present level, the medium-term outlook for the industry is for a stronger growth in demand in both foreign and domestic markets.

It is projected that in the period up to 1979 total exports and manufactures of machine tools and investment in plant and machinery will rise faster than in the past. The growth figure is tentatively put at 1.5 to 2 per cent. a year assuming 3 per cent. growth in the GDP.

Quality

Although the most important factor in export markets undeniably remains quality, the efforts of the MTTA are recognised as being rewarding in many cases, for example in the increase in sales to Japan in 1973 and 1974. But there are pitfalls in encouraging high trade levels with other countries, most notably the amount of imports sucked in.

In recent years the penetration of EEC exporters of machine tools to the U.K. is more impressive than Britain's sales in the other direction. However, there is an underlying trend towards an increasing trade surplus with the EEC, according to a recent report. It suggests that while this trend cannot be expected to continue, the fast rate of growth in the EEC market of 11 per cent., together with lower tariffs because of EEC membership, the price advantages arising from these and a strong competitive position in most tool types, particularly drilling, turning, boring and numerical control machines and equipment, should ensure that Britain can maintain a mildly favourable balance in a context of a greatly increased volume of trade.

Areas of greatest potential growth are seen as centring around the Eastern bloc countries, Japan and the United States. Although the former tends to be unpredictable, the need for Western equipment is likely to continue at an increasing pace.

Lorne Barling

MACHINE TOOLS IV

Constraints of demand

"THE DEMAND cycle, which saps the strength and confidence of the industry during a recession and leaves it weak to meet the following upturn, constitutes the most serious constraint on the industry's performance. Many other problems are linked with this," says the machine tool "Little Neddy" in a recent industrial strategy report.

There is nothing startling or new in that. It just echoes what the machine tool industry has been saying for many years. The whole industry is put in a state of permanent turmoil by the uneven cycle of demand from which it seems impossible to escape. Some companies manage to alleviate the problem by greater exports, others by factoring an increasing part of their sales and others by turning themselves into pure importers or agents.

But several companies have been driven out of business completely and there are English towns which have specialised in the manufacture of machine tools since the inception of the industrial revolution from which the industry has now completely disappeared.

Two years ago the industry, through the "Little Neddy," made another attempt to overcome the complacency of the authorities who, according to Mr. Anthony Frodsham, chairman of the EDC, "recognise the existence of the cycle but reckon it to be a minor problem which a more ingenious industry would take in its stride."

It has been a long haul but the message seems to be percolating through. The Government's so-called accelerated investment scheme designed to encourage companies to bring forward capital investment or to take down shelved projects during this current recession was certainly a counter-cyclical scheme, albeit of the ad hoc kind.

The Government made available £120m. for this scheme and by the end of last month nearly half of that sum had been committed. Some £55m. had been offered or approved to help 63 projects expected to generate an extra £400m. of investment during the next five years. Another 146 applications were being seriously considered for help with projects involving another £563m.

To look at the longer term, a committee was set up under the chairmanship of Sir Eric Roll to consider what changes might be made in the way British industry is financed. This body is due to report shortly. The possibility of a counter-cyclical scheme or schemes has been one of the things considered.

The committee was provided with evidence from the "Little Neddy" which gave a stark outline of the debilitating effects the cycle has on the industries it hits, unsettling the workforce, sapping competitiveness in overseas markets, encouraging imports and cutting cash flow and profits as often as two years in every five.

Harder

The paper also showed what the industry had claimed for years—that the machine tool sector is hit harder than any comparable industry. It revealed that the standard deviation from "normal" in U.K. demand over a 14-year period was 24.5 per cent. And, as a result, falls in employment during recession have been as high as 33 per cent.

The cycle is an endemic feature of a free market economy if it is fast-growing, the EDC pointed out, so the disease cannot be cured completely. But the worst of the symptoms could be alleviated by some kind of counter-cyclical policy.

This would in no way be aimed at encouraging U.K. industry to buy more machine tools or other capital goods or even to buy more made-in-Britain products. It would simply encourage a change in the timing of investment by user industries which would prevent the trough in the cycle of demand going as deep as it might otherwise have gone.

Dealing with the effects of the cycle on capital goods suppliers like the machine tool makers, the "Little Neddy" paper pointed out that it creates unease among employees. Those laid-off during a recession usually fail to return when the upturn comes; those employees who remain are worried when it might be their turn to go and tend to look for jobs elsewhere when they can; potential recruits are also put off. The problem is made more acute because the people involved tend to be reasonably skilled.

At the same time, the cycle has produced extremely cautious managements. Regularly faced with problems of survival, and difficulties of raising finance, they often interrupt their own investment programmes, thus lowering the industry's ability, and perhaps willingness, to grow.

These factors combine during the surge in demand which inevitably follows the trough to damage U.K. industries' competitiveness overseas because of the long delivery dates which then have to be quoted. Another result is that imports are sucked into the U.K. because home suppliers cannot cope.

The evidence suggests that the process is not completely reversed during the bad times. Once foreign competition has gained or expanded its foothold, it is very difficult to dislodge it. The result is that imports permanently tend to increase as a proportion of domestic requirements.

The "Little Neddy" put forward for discussion a number of counter-cyclical ideas, both of the ad hoc type and others—more generally favoured—involving the industry and Government in the creation of some form of investment reserve fund.

Under such an arrangement companies would set aside a proportion of their earnings in any year to a special reserve which they would be encouraged to use for investment purposes during a recession and would be discouraged—though not prohibited—from using at other times.

The general principle would be that allocations to the investment reserves would be free of tax—though a sum equivalent to corporation tax would, until the reserve was needed, be deposited with the Bank of England or another authority.

Advantages

The advantages of such schemes over ad hoc arrangements like the recent accelerated investment scheme, are that they provide a means of involving companies in making at least some advance commitment to investment, and could help to move those commitments by use of incentives, or constraints, towards the trough of the cycle.

It would also give capital equipment producers an assurance that the Government accepts the need for counter-cyclical action.

A counter-cyclical scheme would ensure that more funds were directly available to finance investment during recessions and, because the Government commitment to pay bonuses or other incentives would be restricted to money withdrawn from the reserve, these schemes could also be less expensive than the open-ended ad hoc arrangements.

The effects an investment reserve scheme could have on capital goods producers would obviously depend on the size of the fund and how well it was spread across the plant and machinery purchasing industries.

The "Little Neddy" made a very rough estimate from the data available from a scheme which has been operated for some time in Sweden and suggested that, to be effective, a fund at the onset of a recession would need to be equivalent to about one-third of the level of home orders for plant and machinery which could be expected in an "average" trough year.

Given various other assumptions, the net result could be that demand might be lifted by about 8 per cent. during the "trough."

In spite of the "Little Neddy's" efforts, backed wholeheartedly by the Machine Tool Trades Association, Government interest in the idea of creating a counter-cyclical investment fund on the Swedish lines seemed to have waned. Some enthusiasm was shown earlier this year by the Government after the proposition had been pushed strongly by the unions and this is why Sir Eric Roll's committee exists to-day.

The Government's interest diminished when preliminary investigation showed that any such counter-cyclical scheme in Britain would involve substantial injection of State cash and would take several years to become effective.

A major obstacle to all the counter-cyclical proposals was found to be the need for both a reasonable level of profit among companies and/or a high level of effective tax payment on which relief could be given to induce companies to set aside the funds.

Without these preconditions companies could be encouraged to operate such a scheme only through interest relief or other benefits given by Government or—if they were forced to set aside the funds — the money would have to come out of their general working capital.

Under the voluntary Swedish scheme, companies can set aside up to 40 per cent. of their pre-tax income for the fund, 46 per cent. of which is put into a blocked account which can be released only by Government permission (when a "recession" is formally declared). The attraction of this arrangement, which involves no direct Government subsidy, lies in the relief from taxation and the write-off provisions once the money is used — neither of which would be so attractive in the U.K. where effective tax rates are lower and accelerated depreciation exists for nearly all capital investment.

It remains to be seen what the Roll committee will say on the subject. But the machine tool industry hopes that the Government, at the very least, will indicate that it will have ready another accelerated investment scheme and introduce it much earlier in the next trough in demand.

Kenneth Gooding

Numerical control

WHEN THE Machine Tool Industries Research Association carried out its massive survey of reliability involving some 9,400 metal-cutting machine tools, which was completed about a year ago, it was realised that there were not enough numerically controlled machines covered to yield a truly representative cross-section and a further investigation was undertaken.

Recently finished, this included 192 numerical control tools and it showed a number of findings which, at first glance, would reinforce the arguments of the diehards who will not have anything to do with these "newfangled gimmicks" used for at least 20 years in key industries.

Where ordinary machine tools showed an average downtime of 2 to 3 per cent. of available production time, due to wear, ingress of dirt or human error, the nc tools showed a significantly higher downtime and failure rate and were far more sensitive to the quality of maintenance than their less sophisticated counterparts.

There is a lack of the skilled engineer to maintain nc equipment and possibly too great a variety of nc systems in the field.

But there also are sub-contracting maintenance services and even if the cost of their work in a plant is considerably higher than if local maintenance staff are involved, a price has to be paid for expertise. It is likely to be much less than protracted down-time on high output machinery.

It may be that even the diehards will change their minds under pressure of the need to improve productivity as and when business activity recovers from the deep trough of 1975. Certainly the increasing availability of easy retrofit and easy to operate numerical controllers and aids to equipment performance such as digital readouts and high accuracy measuring devices should make their conversion much easier.

Some nc industry leaders clearly believe that other countries have a higher percentage of these barriers to efficiency. MCP Hewitt, of Plessey Numerical Controls, has pointed out admittedly on the basis of somewhat elderly statistics, that Britain appears to be ahead of both the U.S. and Germany in its use of nc tools, but in 1975 exceeded the latter's output of electronically controlled machine-tools by some 400 units.

Plessey is Europe's largest maker of machine tool numerical control equipment, ahead of Siemens, ASEA, Telemecanique, and Olivetti. But it faces severe competition from multinational giants based in the U.S. and from Japan in a highly fragmented market with about 40 suppliers of stature and some 150 minor participants.

One important factor in operating in this type of industry is the cost of maintenance and with customers all over the world, innovators have to tread cautiously before launching a new product because an undetected weakness in equipment, which has been widely distributed into areas many flying hours from headquarters, could cripple them.

This is one of the reasons why makers of nc equipment are likely to welcome the advent of the microcomputer which can be mounted with several ancillary devices in a single printed circuit board and provide the sole control source for the machine tool, even a very complex one. The board is immediately replaceable should there be an electronics malfunction.

This means that a good deal of the old fears of innovation and sophisticated equipment could disappear quite fast and Plessey has been quick to take advantage of the greater design freedom and reliability offered by the microcomputer.

Earlier this year, it brought out equipment based on microprocessors and intended specifically to make any company's move into numerical control very much easier. Development of the RUSC system of part programme producer and matched machine controller was timely since it was believed within Plessey that computer numerical control based on minicomputers could not compete with hard-wired control equipment except in exacting cases or where users wanted to run a group of machines.

The microcomputer in the company's view brings down the total cost to the level of that of hard-wired equipment while providing by and large the same program storage and editing flexibility as the more expensive minis.

This is not to say that the company is opting out of equipment based on minis since it is showing the NC3700 at Mach 76 alongside RUSC. But NC3700 can cope with up to six axes including spindle, controlling them simultaneously whereas RUSC stops at four.

This is not a strictly valid comparison since RUSC is a dual system of interpreter and machine controller while NC3700 can be applied to any machine tool.

However, this is a sign of the times since MTIRA itself has developed and built a prototype microprocessor for use where the range of sequences demanded by the job is too much for the capabilities of programmable sequence controllers. It will be displayed on a sheet metalworking machine from the Oliver Machine Company.

It is unlikely that many of the protagonists of computer numerical control (cnc) will agree with the Plessey view. That could well be their loss since Plessey, as a major international electronic components company has been well aware of the possibilities of the microcomputer for some two years and has reached a wide-ranging understanding on support and the construction of practical devices based on the Intel 8080, considered by many to be the best-understood and widest used unit of its type.

Initial reaction to RUSC has been that it solves one of the main problems of nc operations—that of part programming, since the operation to prepare this set of control instructions can take place away from the workshop while the machine tool is producing other parts. It is also much more rugged than the equivalent mini-based equipment.

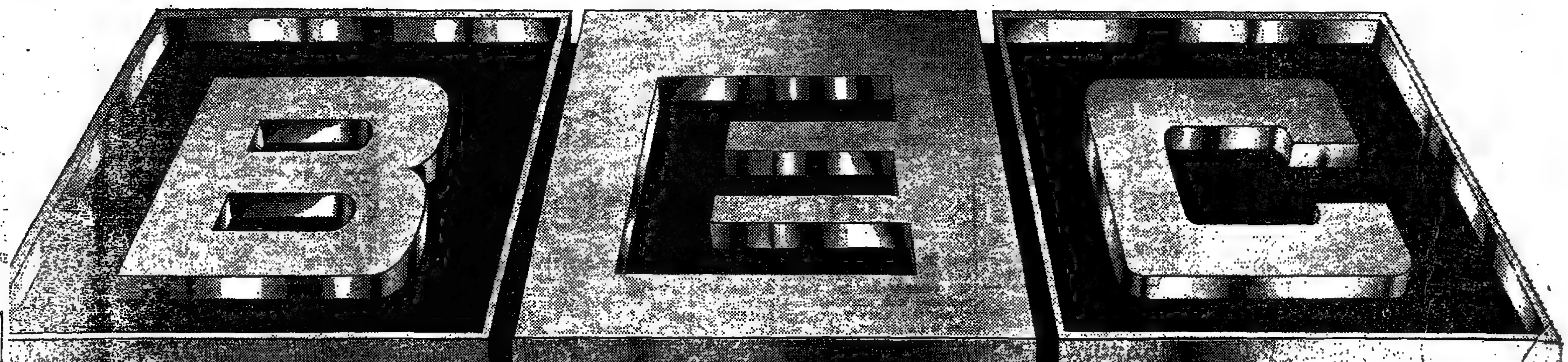
The appearance of this new approach to nc could [illegible] down the threshold of application by a considerable sum. That there is a need to do this is underlined by the various attempts to cut costs so that low quantity manufacture will still be economic by nc methods.

One of the most recent of these is the writing by MTIRA of a tailor-made processor which will automatically produce nc tapes for the manufacture of components having external turned forms. It applies to the manufacture of ranges of [illegible] components which, though of widely varying form, can be made on a specific workset up and a given selection of tooling.

Time alone will show how the different approaches fare in the European market where annual demand for nc installations is roughly equal to that of the U.S. at about 2,400. The major outlet is Germany with 750 a year with the U.K. at 650, Italy at 500 and France at 300.

Ted Schoeters

Unrivalled product range. Strong finance. World-wide marketing.



It is not unrealistic to say that the success of Mach 76 has a direct bearing on Great Britain's economic recovery.

A lasting recovery can only be based on a capital equipment investment programme which will enable British industry to compete successfully in world markets.

The importance that the B.Elliott Group–BEC–places on Mach 76 can be judged from the fact that six of the BEC companies will be exhibiting nearly one hundred machines, many of which will be completeley new to the UK.

These machines are the tip of an iceberg. BEC manufactures and markets in the UK and overseas what is probably the world's widest range of metal cutting and metal forming machine tools, from a £120 bench lathe to a giant press valued at £250,000.

International Exhibition of Machine Tools Gauges & Tooling
National Exhibition Centre Birmingham, England.
22 Sept-2 Oct 1976

BEC AT MACH 76

BEC is represented by these six companies who, between them, are displaying ninety-nine machines, many of them completely new to the UK:

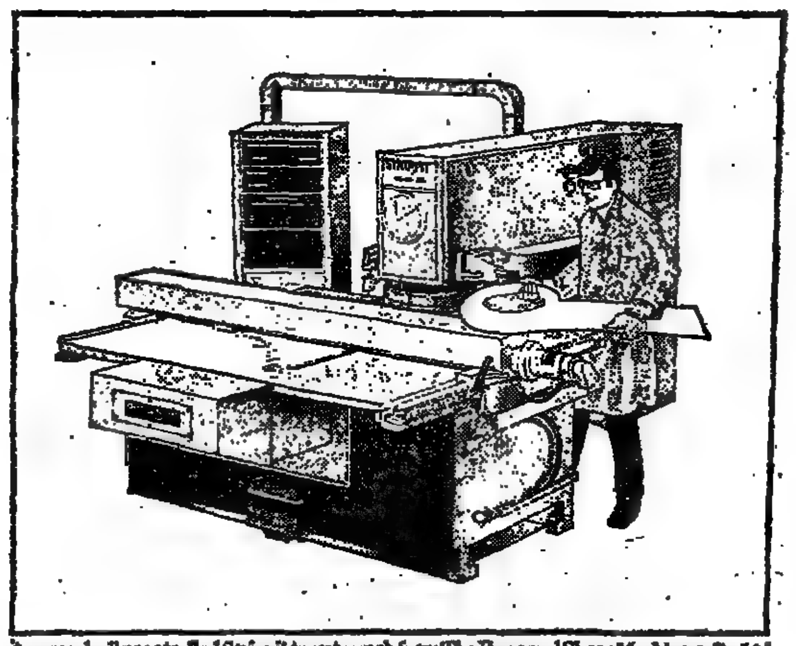
The Butler Machine Tool Co Ltd Stand No. 5.58
Snow & Co Ltd Stand No. 5.58
Elliott Machine Tools Ltd Stand No. 5.58
Elgar Machine Tool Co Ltd Stand No. 5.27/5.45
PMT (Machine Tools) Ltd Stand No. 5.17/5.54
The Press & Shear Machinery Co Ltd Stand No. 5.10/5.59

BEC's financial and organisational strength is based on a divisionalised structure and a judicious mixture of manufacturing and marketing operations. Between them, the divisions offer industry wide-ranging services which extend well beyond the machine tool sector. These include ferrous castings, pressings, specialist engineering products as well as a complete range of machinery for the plastics processing industry.

Structured to serve industry

To avoid the slow reaction to fast moving trends which often characterises large organisations, BEC operates autonomous divisions, each serving specific market areas. Operating subsidiaries are of the right size to ensure personal customer communication.

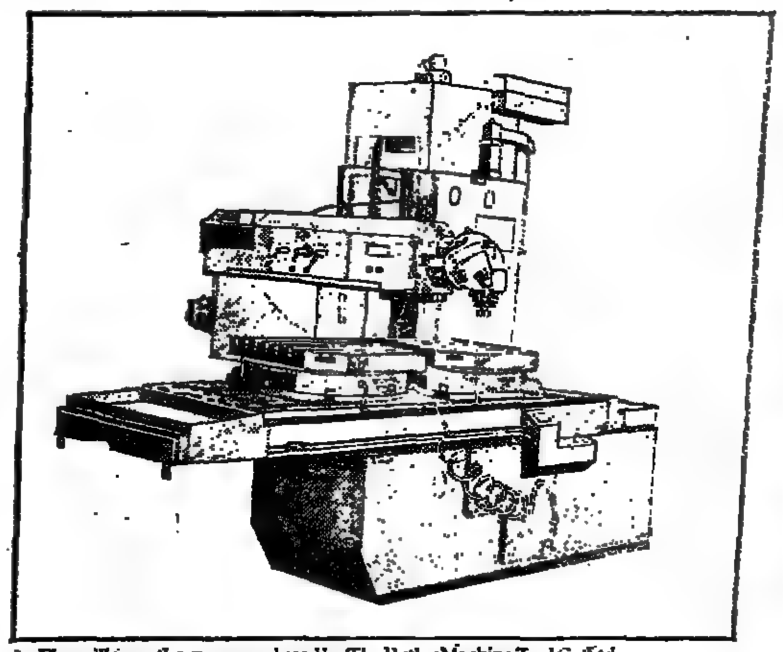
The small BEC headquarters provides financial support and, equally important, the "wider view" of technological developments which is so important in the world of machine tools.



A numerically controlled Strippit turret punch from The Press and Shear Machinery Co. Ltd.

This "wider view" has led BEC to commit considerable resources to handling a greater proportion of more sophisticated equipment, which has remained in high demand throughout the recent recession.

The machine tool industry is notoriously cyclical. Mach 76 comes at a time when the graph is expected to move sharply up. Then once again the machine tool industry will be quoting extended delivery dates.



An Elgamill from the range produced by The Butler Machine Tool Co. Ltd.

BEC, with its mixture of manufacturing in Britain and merchanting of the best machine tools from around the world, is in a strong position to counter such a cyclical trend, and to meet customers' needs from one of its manufacturers or suppliers.

Against the trend, 1975/76 was BEC's second best profit year on record; sales were split evenly between customers at home and overseas and direct exports from the UK were up by more than 25%.

BEC's participation at Mach 76 and the range of new and proven machine tools on display are an accurate reflection of the company's faith in the future of British manufacturing industry.

BEC

THE B. ELLIOTT GROUP

Adding strength to industry

1974
THE BUTLER MACHINE TOOL COMPANY LIMITED
A member of the B. Elliott Group

BEC HOUSE VICTORIA ROAD LONDON NW10 6NY

Growing use of leasing

THE LIQUIDITY problems experienced by many engineering companies during the past two years have been an important element in the need for more sophisticated financing of machine tool purchase, in which a number of finance companies have built up considerable expertise.

Although engineering concerns are undoubtedly conservative by nature and would often prefer to replace equipment out of earnings, or perhaps by means of conventional bank borrowings, this has not always been possible due to reduced cash flow.

This has come about largely as a result of inflationary pressures such as higher material and labour costs, the dull market of the past two years and the need to replace equipment which may have been outdated before any of these problems arose. Of course many companies have taken the decision that markets are so uncertain that investment in new machine tools is foolhardy, and have adopted the policy of when in doubt, do nothing. But this is certainly a shortsighted view which could lead to companies becoming uncompetitive and the standard of their products falling.

For these reasons many engineering companies, particularly smaller ones, have gone for less conventional means of finance, such as leasing and hire purchase. Both are comparatively new to British industry, although they have become increasingly popular with sectors such as road transport and mechanical handling equipment.

A number of companies have specialised in machine tool financing, with Mercantile Leasing (a subsidiary of Mercantile Credit), Schroder Finance, Credit Lyonnaise and Bowmaker among the better known. The Association of European Machine Tool Merchants and others connected with the trade have been active in making the various facilities known to their members.

Perhaps the most valuable advantage of leasing or hire purchase relates directly to the cause of financing problems—inflation. Since inflation has been partly responsible for eroding the funds which would normally be available for outright purchase of machine tools, these forms of financing have been designed to provide an alternative.

It is argued that valuable capital should not be tied up in purchases of this nature when borrowed money is available, due to the depreciation in the value of that money over the borrowing period. This is a valid concept while a high rate of inflation exists and interest rates remain within a defined bracket.

The crucial element in arrangements of this kind is the ability of the company concerned to monitor and manage repayments, particularly in relation to the interest rates involved. Ideally, a fixed rate and consequent fixed costs are desirable for smaller companies without sophisticated financial systems. But the persistent fluctuations in minimum lending rate in recent years has made it difficult for leasing companies to offer this kind of deal widely.

The mechanics of leasing and hire purchase are perhaps best explained in terms of schemes offered by major companies.

Schroder Leasing points out that under a leasing agreement the equipment always remains the property of the finance company. A normal lease comprises two parts known as the primary and secondary periods, with the primary period usually of three to five years duration, and it is during this time that the finance company recovers its investment cost and charges by means of either monthly or quarterly advance rentals. On expiry of this period, the lessee can enter into a secondary period by paying nominal rentals.

Schroder suggests that the major benefits are as follows: Immediate use of new equipment without capital outlay and retention of working capital, with rentals, with continuing inflation, considerably reducing in real money terms as the lease progresses.

In addition, the whole of the leasing rental (excluding VAT) constitutes a revenue expense and the lessee is therefore able to reduce his tax liability.

Leasing finance charges are based on the equipment cost, excluding VAT, so that as each rental falls due it is subjected to VAT at the current rate. However, a lessee who is registered for the purposes of VAT is able to recover this as an input credit.

Furthermore, it is pointed out that a lease does not appear as a liability on the lessee balance sheet, and borrowings ratios are therefore unaffected and other credit lines remain unimpaired.

Finally, where equipment is leased for use in qualifying premises located in a development or special development area, the benefit of the grant received by the leasing company can be reflected by means of a reduction in the rentals payable under the leasing agreement.

Schroder's purchase lease scheme is described as nothing more than a lease containing an option to purchase, with the lessee becoming the owner of the equipment merely by paying a nominal option fee. Purchase of lease is, however, only available to limited companies or where the total purchase price (including the finance charge and any deposit) exceeds £2,000.

The benefits outlined are: the ability to claim a 100 per cent. first year allowance on the net of VAT cost of equipment, with the proviso that the lessee must be earning taxable profits adequate to absorb the allowance. The finance charge element of each rental is a charge against the lessee's taxable profits, thereby reducing still further the lessee's tax liability.

Rentals are fixed over the period of the lease, facilitating accurate budgeting, and the lease is 100 per cent. financing with no deposit normally required.

Finally it is noted that normal leasing is tending to become more expensive. Therefore while purchase lease rentals are usually somewhat higher than normal lease rentals, if the lessee is able to absorb fully the 100 per cent. first year allowance, the total net tax cost over the full leasing period may be less than the cost of a normal lease.

Mercantile Credit's deferred purchase scheme is described as "a classic case of instalment credit" with regular repayments facilitating sensible budgeting, and arrangements that can be varied considerably.

One of these offers special agreements to align repayments with income flow. For example they can be lower in the first year while a machine is coming into full commission, or be made on a seasonal or irregular basis to suit particular trading patterns.

The argument in favour of these financing arrangements were well summed up recently by Mr. N. J. Donkin of Schroder Finance: "It is surely a wiser use of resources to spend money on assets which are likely to appreciate, such as land and buildings, rather than on machinery which will decline in value," he said.

He commented that it was strange how some companies were still convinced that they must own all their own machinery, adding that there was no intrinsic value in ownership and that it was only the efficient use of equipment which generated profits.

The drawbacks of using outdated machine tools were well known—they tended to be inefficient and costly to maintain and the profits of the user were overstated as a result of equipment having been fully depreciated.

With replacement costs rising all the time, provision was not being made under these circumstances towards meeting these costs. Indeed, the cost of replacement was frequently regarded as a major obstacle in the way of replacing worn out equipment, because the user became convinced that only a substantial cash outlay would allow him to change to modern machines.

Lorne Barling

Leyland: hopes and problems

THE MOTOR industry is probably the major domestic user of the products of the British machine tool manufacturers. Within this sector British Leyland is clearly the most important target for sales, partly because of its size, but more importantly because of the massive investment programme that the group now has to get under way in accordance with the ideas set out in the Ryder plan. The Leyland re-equipment drive brings with it, in fact, the hopeful promise of new orders that the machine tool sector has seen for many years. But at the same time it will be bringing considerable problems as well.

The difficulty spelled out by machine tool manufacturers time and again is that Leyland's investments may produce orders which conflict head-on with a surge of demand from elsewhere. To a certain extent, in the absence of a significant stock-building plan for the machine tool industry, this bunching of orders is bound to happen in boom times. But in Leyland's case, manufacturers have been watching the cyclical swing very closely in the fear that any delay in the company's action on this front will carry the main investment build up well into the period of the next general industrial resurgence.

Because of the size of the Leyland investment—£1.5bn. at 1975 prices over the eight years to 1983—it is important that the ordering pattern is spread in an orderly fashion over the whole period. If Leyland fails to achieve such a pattern and a log jam of orders builds up, there is a great danger that many contracts will go overseas. This is exactly what no one wants to see happen, least of all the Government, which saw its rescue of the motor company as one means of helping in the generation, through Leyland's orders, of a general industrial revival.

The machine tool industry's concern over Leyland's ordering procedures is a significant factor behind the growing anxieties about the company's industrial relations problems. Because of these difficulties capital investment projects were summarily cut off back in the winter of last year. Mr. Derek Whittaker, the managing director of the group's car organisation, said that the company was in no position to press ahead with investments while the disputes continued. Although Leyland would clearly have taken a considerable time to reach its key decisions in any case, there are signs that this move has delayed approaches to machine tool manufacturers. Both the truck and bus and special products groups appear further ahead with their development policies than the car group.

The timing of BL's investments is even more important in the context of the similar plans which are also being pushed through at Chrysler UK following the Government's intervention last year. Chrysler is due to launch two more cars in the next three years and a new commercial vehicle. Clearly, many of these changes will demand considerable machine tool investment, even though some of the vehicles have been designed to make considerable use of existing designs and components. For example, the new Alpine model now being assembled in the U.K. from French-made parts will gradually be adjusted to take more British-made components. Eventually Chrysler may invest an extra £23m. in the project to make it an entirely British vehicle.

At the same time, the plan to integrate Chrysler's U.K. factories more fully within the group's European organisation may eventually mean more work for engine and other component lines within the British company. Here again there must be investment, particularly since Chrysler as a European group seems to be moving towards front-wheel drive designs, while the present U.K. company is closely wedded to rear-wheeled drive techniques.

Recently at a House of Commons committee inquiry into Chrysler the Machine Tool Trades Association drew attention to the problem that could be facing the industry in servicing the future demands of the motor manufacturers. There are a number of areas said the MTTA, where capacity was insufficient to meet demand on the normal four to five year cycle basis. Such areas included one of particular interest to the automobile industry—transfer lines for cylinder blocks. Given the fact that Leyland is planning a new range of engines for its vehicles, this weakness of the machine tool industry must be of particular concern. Significantly, the MTTA added that the trade cycle since the early 1950s had been "considerably affected by the ordering pattern of the major U.K. automobile companies."

In general terms these are not, of course, new problems. The significance of the motor industry to the machine tool manufacturers has been recognised for a long time, and a joint working party between the two sectors was set up in 1969. This identified no less than 20 types of machine that had been purchased abroad by the motor manufacturers at some time. The MTTA notes that they had been bought overseas "some times for reasons of technical superiority, sometimes for lack of purchaser knowledge of U.K. resources, and sometimes because, although U.K. products had proved their technical competitiveness subsequent to a first purchase, a change in the source of supply could not be made because of shortage of tooling."

The MTTA goes on: "The report emphasises that major tooling programmes depended on the introduction of new models and that these—for competitive reasons—tended to coincide between each automobile builder, thereby exacerbating the cyclical problem confronting the machine tool industry. The report concludes that vehicle manufacturers should give careful thought as to how they could give machine tool suppliers an earlier sight of their forward plans.

"It remains of vital importance, however, to the maintenance of sufficient capacity in the U.K. machine tool industry that firm commitments are entered into by purchasers at as early a date as possible."

A second major timing problem over BL's investments concerns possible overseas orders for British machine tools. Poland, for example, has indicated that it might want to place orders for a considerable portion of £100m.-worth of equipment before the end of this year. The Poland contract would be for a whole range of machines mainly associated with the country's budding tractor industry, which is being reformed with the help of Massey-Ferguson-Perkins. If the orders materialise as planned, they could be building up in importance through next year—just at the time when the industry may be stretching to meet Leyland's requirements. Another Comecon bloc country, East Germany, is at any rate confident that it will be able to capture a substantial proportion of BL's new orders. It has already won a number of contracts from the special products group.

Some of the answers to the conundrums posed by BL's investment programme should be known before the year is out. The company is now heading into a period of intense activity which should see some of its most vital projects—the new range of engines, the re-equipment of the foundries, and the new Mini—signed off. The details of these will give the machine tool manufacturers a clear idea of where the most acute demands will be felt: for example, it looks as though the Mini replacement will be initially planned with the existing car's engine and gearbox, diminishing the immediate impact of what promises to be a very major re-tooling exercise. Whichever way these decisions go, however, one thing is clear: the machine tool industry will face a considerable challenge and opportunity in the years ahead.

Terry Dodsworth

Secrecy surrounds NEB loans

SOMETHING which, ially, could involve the -out of not insignificant its of the taxpayers' ', *the secrecy with which* ational Enterprise Board inds its loans for machine tockbuilding scheme is, at ast, surprising.

' much money has been so far is kept closely ed: how many companies taken advantage of the e is not divulged; with nany the NEB is currently g is not known. Even achine Tool Trades Asso- n, the industry's highly entative trade association *cording to those close to* t let into the secret.

scheme itself is, however, htforward. With the ry deep set in recession rders at an almost record ven if the level does not r to be worsening, it lly represents yet one attempt to bring some ity into a business long ed by cyclical ups and s and now suffering as as any other sector of the my, and worse than most, the current slump in t *all kinds of economic* ty.

formal launch came in ı when Mr. Eric Varley, Industry Secretary, nced in the Commons that 'EB was to consider appli- ıs from individual com- s for the provision of e on commercial terms to machine tool companies ild for stock against the when the upturn comes. Minister's statement was ulmination of negotiations en the NEB and the ine tool manufacturers earlier, between the ıfacturers and the Depart- *of Industry), anxious to* some such scheme under to supplement the other s of assistance the industry getting, such as the £20m. rnisation scheme Mr. ey had announced eight hs earlier. It had been hadowed in February n Mr. Denis Healey, the ıcellor, had disclosed that art *of the general package* easures aimed at stimulat- industrial recovery, the would discuss finance for *stockpiling of machine tools* ı the industry.

t that time, it was made r that there was no ques- ı of "subsidising" the industry *out of public funds* and that any NEB assistance would have to be at commercial or near-commercial rates. The idea had a long history: a decade ago the old Industrial Reorganisation Corporation—in more ways than one a precursor of the NEB—drew up an elaborate scheme for financing the purchase of machine tools, though it was not adopted. More recently, Mr. Derek Hartle, a leading figure in the industry, proposed the setting-up of a purchasing and selling agency by the manufacturers themselves to buy and stock the industry's excess production in a bid to achieve some stabilisation of the demand cycle. And a year ago the Government put forward a tentative stabilisation scheme of its own for discussion by the industry's Little Neddy. Subsequently, there had been *industry hopes of a Department* of Industry run building for stock scheme, though that could have run foul of EEC requirements.

So the *proposal revealed by* Mr. Healey had a long pedigree. What was not then clear was whether it would be anything more than *a mere sop. The key* question was over the exact meaning of commercial or near-commercial terms. If that was strictly *to* be adhered to it was difficult to see what value the scheme could be, for loans at commercial rates to good risk customers were and are obtainable elsewhere. If you had to make out a good commercial case for borrowing the money, and be able to afford normal interest repayments, you might as well negotiate with your bank manager as with the NEB.

This was seen clearly in the industry; there the hope was for a "universal" no-strings-attached scheme, something that the NEB made clear at an early stage was not on. In mid-February the NEB told the *Machine Tool Trades Association*: "We have come to the conclusion that it would not be practicable for the NEB to devise a general scheme to finance the stockpiling of machine tools, principally because the companies in the industry vary so much in their requirements. We fully endorse the need for such stockpiling, but as you know we ourselves are required to act commercially and we therefore think that what we should do is to consider each individual case on its merits. The solution may in one case be a loan, whereas in another it may have to be the injection of equity capital."

And the MTTA itself told its members: "Although the Association had hoped that it would have proved possible to produce a clear-cut 'universal' scheme, this has not been the case since NEB are unable to tie themselves to the formula put forward by the MTTA."

That formula had involved the setting-up of a source for funding on a deferred, but commercially rated, interest basis, using the stock created as the security for the loan — a way, in other words, of obtaining the sort of finance the banks and other lending institutions would not consider at a time when companies in need of cash could not afford the extra outgoings normal interest payment arrangements would involve. And there had been some comfort in the *negotiations with the NEB on* it. For the MTTA was able to continue in its letter to members: "It is considered by the *Association negotiators, however*, that this formula may well be used in some circumstances which NEB regards as suitable *and they further hope that this* may be found to cover a majority of cases."

Thus, the "commercial" requirement had to an extent been sidestepped after all, particularly when the effects of inflation on those deferred interest payments are taken into account. Sure enough, the first loan to be announced—indeed, the only one to have been announced so far—was on just this basis. The borrower was Alfred Herbert, itself an NEB subsidiary following its bailing-out from acute difficulties by the Government. The loan is £5m., of which £2m. was taken up immediately, repayable within a maximum of two years, at a commercial interest rate—but with the interest not repaid until the loan itself is, though earlier repayment is possible if the machines stockpiled are sold before the two years are up.

To-day, what other funding there has been is not known, though the NEB does say it has made loans to "several companies." But the overall amount involved is relatively small, certainly under £10m. including Herbert's £5m. At the time of the Herbert loan, in May, it was said that another six deals were in the final stages of negotiation, with about 20 firm inquiries having been made. To-day, talks are thought to be in progress with around a dozen or so companies.

What seems clear is that response to the scheme has been somewhat disappointing, just as response to that earlier £20m. Government industry modernisation scheme was (so much so that significant changes to it were announced only last month).

The reasons for this are several. First, there is the suggestion that one quid pro quo for a loan might be an NEB equity stake in the company involved, something guaranteed to scare off some potential borrowers.

For the NEB is, as it emphasised in that February letter to the MTTA, treating each application on an individual basis. "We are approaching it in exactly the same way as we approach any company which comes to us for money. Discussions have always taken place on an individual basis," it says. "There could even be a cash for equity deal"—though so far, apparently, the question of exchanging a slice of the equity for a loan has not entered into any of the discussions with individual companies (but, on the fringe of the industry, the NEB has just announced that it is to acquire 30 per cent. of the capital of Agemaspark, a private company manufacturing spark erosion machines, by subscribing £100,000 for new ordinary shares).

Also important is the fact that many machine tools are not turning out products suitable for stockpiling. A company with a range of highly successful standard products—the 600 Group's Colchester Lathe, for example—may be able to build for stock rather than for an individual customer. Another group making sophisticated high technology machines tailored for individual customer requirements cannot.

Indeed, by and large the final touches can be added to a machine only after it has been sold and the customer has indicated just what he requires from it. Overall, of the 180 manufacturing establishments in the U.K., it is estimated that only just under half would consider building for stock at all.

Quite apart from that difficulty, some manufacturers see building for stock as in any case a possible hazardous occupation.

But, with the NEB not only allowing deferred interest payments but also accepting a position as creditor inferior to other suppliers of finance, the consensus in the industry appears to be that the scheme is not only a highly important one but something which should be continued even when the machine tool makers' fortunes have recovered. Thus, Mr. George Trowbridge, president of the MTTA (and a major figure in the scheme's original formulation), stresses that the operation "should be perpetuated as clearly it offers a very useful form of aid as far as this industry is concerned." It was not just "something which should be dished out only in times of famine but should be ongoing."

And the industry's Little Neddy, in its sector report drawn up as part of the Government's industrial strategy, stresses the need to ensure capacity is maintained, so that any boost to orders when the recession ends can be met by the industry. Building for stock could play an important role here, and there is no doubt that the NEB scheme is helping the industry, it says.

At the same time, the Little Neddy has no doubt about the limitations of the scheme. "NEB funds are unlikely to be sufficient to cover more than a small proportion of the need for additional stockbuilding finance," it warns. And, it adds, "for technical and customer demand reasons, stockbuilding is not practical for all types of machines."

Nonetheless, the industry was building for stock on a "substantial scale, but lack of finance or fear of cash problems if the recession is prolonged will prevent many firms from doing this to the extent they would wish."

David Walker

Cutting technology

THOUGH TUNGSTEN and titanium carbides are in themselves extremely hard materials, as are the refractory oxides or ceramics, they do not reach their full performance as cutting edges in tools for application on lathes, milling machines or shapers before they have been worked to a high edge quality by diamond grinding and lapping wheels.

Metal pressing dies in which the carbide powders are initially formed have working surfaces lapped to extreme smoothness by diamond compound. *But if a tool of non-*standard shape is required, rather than go to the expense of die-making, the pressed carbide form *from the nearest* shape available is shaped in the green state by electro-deposited diamond slitting discs, twist drills and grinding wheels.

It is thus of considerable importance to the tool industry that De Beers Industrial Diamonds is just launching a new synthetic grit formulated specifically to give a better grinding performance on cemented carbides of whatever composition. CDA is the designation of the material which *has a mosaic structure to resist* shattering while breaking under excessive grinding pressure to present fresh, sharp cutting edges to the workpiece.

Blocky, irregular shapes with re-entrant angles give a good purchase in the embedding resin and the power absorbed is about 10 per cent. less across the board compared with competing grinding wheels of current diamond formulations.

Three types of grit are on offer to wheel manufacturers, two with 50 and 30 per cent. nickel as a coating for various wet-grinding applications and *one copper-coated* for better heat removal in dry grinding.

Development

Two years' development and testing and a great deal of money have gone into the CDA *project and the company is con-*vinced it has a winner, particularly for arduous applications. Most widely used of the carbides is probably tungsten carbide on which a patent was taken out for the first time by Krups in 1923 followed by the marketing of sintered tungsten carbide tool materials in 1926. It is still used in large amounts for the machining of short-chip materials.

In the intervening years, various additives have imparted new properties to the carbide and two streams of development have appeared, one following the addition of such materials as tantalum carbide to provide high performance in steel milling, and the other providing a coating which permits a small group of cutting products to be used in many applications.

Moving from extreme pressures to high temperatures, a considerable fillip to toolmaking technology should result in Britain from the decision to build a plasma processing unit at the University of Liverpool (with the support of a grant from the Wolfson Foundation) to show the viability of plasma heat-treatment processing of the extremely *refractory materials* used to make cutting tools.

Under Dr. Tom Bell, lecturer in the Department of Metallurgy, the unit will go into operation in January 1977 and will look both at the selection of materials and the heat-treatment of the finished product.

The project has been started because the toolmaking industry in Britain is fragmented and has not been able to take advantage of developments in the aircraft *industry or in overseas work on* plasma treatment. It is hoped to demonstrate how production costs can be reduced. Plasma Processing Unit will work closely with the Gauge and Toolmakers' Association to advise members on how the technology can be applied.

Curiously, while diamond is indispensable in the production of carbide tools and the truing of abrasive grading wheels, it is proving a strong competitor to the latter wherever a machine toolmaker provides the modifications or the new designs to take account of the much higher metal removal rates possible with diamond—stiffer structures to the machine-tool body among them.

In the automotive industry, for instance, a very extensive list of applications would cover processes from grinding to *boring and truing to burnishing*. One successful and particularly difficult job has been the production of the curious figure of eight shape for the single cylinder of the Wankel engine, achieving a reduction of the original machine finish of 180 microinches to only 30 microinches at the second pass.

Trend

For the finish honing in particular of cylinder and crank-*case bores, diamond cannot* be beaten and has in fact been shown to cost less than half as much as with silicon carbide sticks

It is only in a relatively small number of cases that diamond, both natural and synthetic, is beaten by boron nitride and then generally where extreme temperatures are generated. Illustrating the general trend towards production cost cutting by designing the cutting head in such a way that it can be indexed once wear becomes excessive on one cutter, is a series of new tools and tooling systems to be shown at Mach '76 by *Birmingham Tool* and Gauge.

Throw-away qualified tooling, which cuts out regrinding and *reduces machine down-time* to almost nothing, is the basis of three new systems from this group including a spade drill with two indexable cutting edges.

A carbide boring blade is held in place on a boring bar with a single Phillips Screw and a tenacious locking system in a layout which is closely followed by a new reaming device. The ground carbide inserts fit the pocket in the tool body in such a way that size seldom needs adjustment after indexing.

Meanwhile, there is such a variety of small tools and equipment in the Herbert repertoire —60,000 items bought by some 35,000 customers—that the company has set up a Univac computer-based network to deal with orders, distribution and billing as well as re-ordering and management information.

Ted Schoeters

MACHINE TOOLS VIII

Association readjusts

THE MACHINE Tool Trades Association, like many of its sister bodies in other sectors of industry, is going through a period of reassessment as it grapples with the effects of inflation on the one hand and with the changing and, in particular, intensely more political scene in which it has to operate.

One of the earliest trade associations of its sort, it traces its origins back to 1910 when a handful of machine tool manufacturers and importers formed the Machine Tools and Engineering Association to act as a central body able to speak for the industry and trade, including negotiations with Government departments.

With an elected membership of 20 companies, it aimed to support itself by the organisation of exhibitions (and, at the same time, to work against the proliferation of exhibitions, many of them of doubtful value, then being seen). The aim was regular shows at sensible intervals, and an early success was scored within a couple of years of its foundation when two exhibitions proposed for 1912 and 1913 were replaced with a single event in the former year, controlled entirely by the company as it then was.

It was seven years later that the constitution was changed and the organisation renamed the Machine Tool Trades Association. The management also altered: in place of the 12 directors under a chairman, assisted by an advising committee, a council was created, an executive committee elected for the conduct of day-to-day business, and the office of chairman replaced by that of president (with the first incumbent being Sir Alfred Herbert, who held the post for 15 years).

Four years later came further reorganisation with the setting-up by woodworking machinery manufacturers and importers of an autonomous group within the Association. In 1940 came another step forward with, after ten years of negotiations, the transfer of the interests of all machine tool importers, who had been previously represented by both the MMTA and the Machinery Importers Association, to the MTTA on condition that their rights and independence would continue to be honoured.

The same year also saw the division of the Association into four sections, representing metal working machine tool manufacturers, metal working machine tool importers, woodworking machinery manufacturers and importers, and allied trades, each with its own committee reporting directly to the Association's council.

The war years, with their absence of much research and development, left the industry considerably weakened and out in the cold so far as many of its traditional markets were concerned. Once a world leader, the U.K. industry trailed behind its competitors, less ravaged by the effects of the war.

To an extent, it could be argued that the industry has never really recovered: certainly to-day its claim to pre-eminence is much weaker than it was before the war. Yet the MTTA's activities in promoting British machine tools abroad since the war have played a major part in promoting the not inconsiderable success the industry has had in regaining old export markets and creating new ones.

Membership

For, despite being somewhat unusual in including importers among its membership (though many U.K. manufacturers of machine tools are also involved, sometimes significantly, in importing), the MTTA has long been among the more export-oriented trade associations. Since 1970 alone, it has sponsored, with Government support, 31 exhibitions around the world in cities as diverse as Peking and Sao Paulo, Moscow and Milan, Chicago and Tokyo.

In the same period, it has organised nine visits to members' plants by groups of industrialists—and potential buyers—from overseas, and sent abroad a further nine trade missions from the U.K. Backing up this trade promotional activity has been the publication of multilingual directories covering both British and imported machine tools.

Other overseas activity has come through the Association's involvement with such bodies as the European Committee for Co-operation of the Machine Tool Industries, the European Committee of Machine Tool Importers, the European Committee for Woodworking Machinery Manufacturers, the International Organisation for Standardisation, and the International Electrotechnical Commission. And alongside all this has been liaison with U.K. diplomatic and commercial posts overseas and foreign chambers of commerce.

At home, the industry has been aided by the Association's activities on the manpower front: since 1962 it has been directly responsible for the recruitment of around 350 university graduates into the machine tool trade as well as sponsoring university courses for machine tool employees at Birmingham and Manchester Universities' Institutes of Science and Technology and helping to organise special courses in hydraulics and electronics for technicians and sales engineers.

On a different front, the MTTA has worked alongside the British Standards Institution in the publication of 67 standards applicable to machine tools as well as preparing and publishing material on safety, health and the environment.

The success of this sort of activity is reflected in the Association's standing within the industry it serves and, in particular, its high level of membership. With some 315 members, it now covers somewhere around 92 per cent. of the industry's total turnover, a level many other trade associations would regard with envy.

To-day, it lists as its foremost activity the promotion of trade, followed by the maintenance of contact and negotiation with the Government and its departments, advising on schemes for the education, training and manpower needs of its members, advising on matters concerning the environment and promoting standardisation, collecting and circulating statistical information, and increasing global awareness of the activities and problems of the British machine tool trade and industry.

In some ways, the list is probably not that different from the one the Machine Tools and Engineering Association's founders had in mind back in 1910. Where a major change has come, of course, is in the amount of—and importance of—that negotiation with Government departments. Generally increasing state intervention in industry, particularly over the past decade, has perforce made the MTTA a much more political animal than it was.

Anxious

There is the general impingement on industry overall of Government tax and other economic and industrial policies, over which the machine tool industry, like others, is anxious to have a loud and clear voice. And there has been specific state involvement in machine tools—in the ailing and now nationalised Alfred Herbert group, for instance, or in the bringing together of the companies that now form Kearney and Trecker Marwin, or again in the various industry aid schemes aimed specifically at machine tools.

As one MTTA official says: "In the early 1970s, involvement in politics—either with trade unions or the Government—virtually never happened. But in the last three years we have created an ongoing liaison with the House of Commons; we have established a lobby there—a situation that no one would have countenanced five or six years ago. Therefore we are increasingly becoming a politically-oriented body ourselves, perhaps like other organisations have had to be for far longer—the air industry, for instance, or, more recently, the motor industry. The MTTA is certainly a political animal: it never was before. We have now become so much more a public body, so much more political."

So, in short, the Association has had to expand its activities considerably, while continuing with such traditional functions as organising exhibitions and other promotional activity both at home and overseas. This, inevitably, has meant spending more, and doing so at a time when both its resources and those of its member companies are becoming more and more strained as the effects of inflation and the trade recession have taken their increasingly heavy toll.

It is this equation which is behind the close examination the MTTA is now having of its future. "No organisation can afford to stand still," is how the MTTA puts it in its own promotional material. "The achievements of the past are not necessarily the keystone to future success. The Association, while learning from past experiences, is currently scrutinising its future direction in the light of current political, trading and economic pressures. The process is not easy for the way ahead is not always clear. Yet the readiness of the MTTA to take stock of the needs of the future is the sure sign of a healthy, virile and mature association."

Brave words, and true ones even if the difficulties might, perhaps, be greater than they suggest. What it comes down to is, perhaps, summed up by Mr. George Trowbridge, the MTTA president, when he says: "We are talking about the ongoing change of emphasis in the various activities of the Association which is emphasised by increasing Government and quasi-Government involvement in the industry. Therefore, within the limited resources of the Association we are looking at how best to deploy staff in new circumstances."

The answers that are eventually found to the problems Mr. Trowbridge's words sum up should be seen quite soon. Quite certain is that the decisions that have to be made are not easy ones. But they are decisions many another trade association is also faced with considering. And the MTTA starts from as strong a base as most, if not a stronger one.

David Walker

Second-hand market starts to pick up

THE SECOND-HAND machine tool market appears to have followed the country's economic trend closely enough to instil some confidence in merchants who suffered severely during the recession. Nevertheless, there remain some dull areas and consequent problems.

It is likely that the economic trend will continue to be followed, and on that basis demand for second-hand machine tools should continue to pick up, but perhaps at a slower rate during the rest of the year than anticipated earlier.

The underlying factor which will determine the rise in demand is the ability of industry to buy machine tools; with high interest rates now prevailing, only major companies have the ability to increase capital expenditure on large new machine tools. Consequently the current demand for good second-hand products is expected to continue unabated.

But perhaps more important, the fortunes of smaller engineering companies, perhaps employing 100 or less people, have a strong bearing on demand. It is felt that when the economic recovery filters through to these companies it will be a strong boost to merchants.

A number of smaller merchants have reported similar though slightly different trends in the market, depending on their particular specialities. Axe Machine Tools of Milton Keynes, Bucks., has recently experienced strong demand from the Middle East in the form of one buyer placing a large single order.

Ability

Exports are seen as an important growth area, although demand appears to be for newer, good quality machine tools. The traditional requirement from the Far East for older products remains. The problem now is that newer machine tools are harder to buy at reasonable prices these days and the ability of merchants to sell abroad is limited by their own financial constraints, often the travelling expense or even the inability of senior executives to leave their domestic work unattended.

Hatfield Machine Tool of Sutton, Surrey, reported that its markets are more brisk now than they have been for some time, and much of this is attributed to the recent rise in the minimum lending rate, which it believes has pushed more customers into the second-hand market.

However, its sales of new machine tools (which are part of its activities) have not been buoyant and the company expressed relief that it has had the second-hand market to help overcome the recent downturn. Like others, Hatfield has also built up its second-hand stocks considerably, obviously straining cash flow, but turnover has remained stable at around £1m. a year. It reports good demand from the Middle East, from countries such as Saudi Arabia and the Trucial States, but demand for old products is so slow that the company is unwilling to buy anything more than about 15 years old.

Although Hatfield Machine Tool believes there is great potential in exports, it has experienced problems in marketing. It points out that if only one machine of its type is available, the effort and time consumed in arranging documentation becomes barely worthwhile. In some cases the item could be sold domestically beforehand.

On that basis it is regarded as more satisfactory to sell to foreign customers visiting the U.K. and to advertise in relevant areas abroad in order to attract the customers.

Tollbridge Machine Tools of Basingstoke has also experienced good demand for high quality machine tools, but slower markets for the general range. This is attributed to the great expense and frequently long delivery dates on new products in the higher range. Foreign buyers are reported to have been consistent, although problems have been experienced in Far Eastern markets due to the dramatic rise in freight rates.

As in the past, the overall market for second-hand machine tools is difficult to judge in the absence of reliable sales figures, but the Association of European Machine Tool Merchants recently carried out a sample survey in an effort to clarify this.

It believes that the upsurge in demand earlier this year was largely attributable to restocking but suggests that their members' home sales of machine tools are split 50-50 between new and used products. Overseas, they are selling around 400 per cent. more used machine tools than new ones.

On the question of exports, the association believes that overseas conventions of the type it holds are of value in providing contact with overseas buyers at a comparatively small cost when compared with individual sales drives by companies. Further, it is felt that the favourable exchange rates provide a good opportunity for the industry, which is estimated to be a net exporter of used machine tools.

There is now an underlying bias in favour of used machine tools, the association reports, and relatively speaking, home sales have been good in the past year when compared with late 1974 and early 1975. It is estimated that 13 to 15 per cent. of total sales of used machine tools are now abroad.

Looking at particular markets, the Middle East has provided a strong demand for heavier equipment and there is increasing emphasis in this area on more sophisticated machine tools, while demand for older products has fallen off quite sharply.

But the essence of demand for these products remains the company which requires a particular, often quite specialised machine tool at short notice. If manufacturers cannot supply it, the company must turn to merchants who can often meet the need with the minimum of delay.

The industry's strength is being close to their customers and knowing their requirements, a factor which has been stressed in discussions with Government on means of assisting the industry.

Lorne Barling

Thames TV's week takeover of Manhattan's Channel 9, New Yorkers showed signs of approval. **Arthur Sandles,** who was there, reports.

The Atlantic may be wider than we think

MES TELEVISION, biggest ie British network majors, the New York television to roars of applause from rican critics. The shows down fairly well with the ence too, with *Love Thy hbour* being the hit of the —a programme which cted one in five of the local ision audience at the time is shown. All this is very ant, of course, and the nes corps is now both de- ed and relieved that in tic terms the week was a ess. But Thames did not ato it for critical acclaim. t it wanted was to make ey.

e real rationale behind the nes temporary takeover of I-TV's minor league opera- was to prove to American ork companies that British rammes could be popular audiences and would not ssarily run foul of Ameri- censorship. In theory this *not exist, but in fact is* iordinarily rigid.

Jf U.S.-style

e Americans have long ed that British humour s translation to meet Ameri- tastes: that British drama s too much on plot and not gh on action: and that sh documentaries are too *ghtful to put into prime* slots against something like *Bionic Woman*. And so no sh programme has ever y hit the American big- . This winter the only signs ritish influence on the net- ks are two translations from BBC originals. *Sanford and* is a rather luke-warm *Step-* and *All in the Family* is a l (but by British standards dle class) adaptation of *Till h Us Do Part.*

American determination to translate rather than buy the original is persistent, and sometimes comical. The U.S. version of *Upstairs Downstairs* was a pretentious flop, and recently Thames itself saw the pilot versions of one of its own comedy shows done American style and winced at the result.

"Translation" from British to American is complete. The Americans buy the rights to the basic idea and the plots but then use American actors and domestic settings. Alf Garnett would *scarcely recognise the 25 ft. x* 25 ft. living room enjoyed by his American counterpart.

The big British successes have *really entered the lists via the* back door. The original version of *Upstairs Downstairs* (London Weekend) went to public service broadcasting, a series of stations supported by public subscription and discreet corporate sponsorship rather than advertising. *World at War (Thames)* and *Space 1999* (ATV) have both been sold throughout the States, but via the laborious and initially expensive system of syndication, which involves making numerous copies of a programme for sale station by station.

To put this in perspective, American programmes do not have the penetration in Britain that their image so often projects. This week there is only *three hours of U.S. TV material* in peak time ITV, four hours on BBC 1 and one hour (a documentary) on BBC 2. The British channels limit themselves to between ten and 15 per cent. imported (which mainly means American) material each week. At the last count there was only one American programme *(Bionic Woman)* in the British top twenty, and that was at equal tenth.

It is American movie-type drama series (*Kojak, Starsky and Hutch, Rich Man, Poor Man,* and *Hawaii Five-O*) which have been successful here. The British mass audience does not seem to enjoy the type of comedy which rates peak time slots in the U.S.—*Chico and the Man, Rhoda,* and even *M.A.S.H.*

Here may be part of the key to why British programmes are unlikely to sweep the American board. Both the British and the Americans protest that their programmes are better than the *rival's*. In fact neither is better, but they are both very different. Humour is the most obvious example. Britons think American humour sluggish. Americans feel British humour to be too slapstick and to have a childish emphasis on bust and bottom jokes. American audiences tend to identify with characters in the programmes they watch. Millions of American women become Rhoda for the half hour they watch the show. I doubt if very few British become Mr. Fawlty or Monty Python where the audience watches jokes and is not involved in them.

Another problem for British TV exporters is that the language difference is much more serious than many imagine. The most recent episode of *Starsky and Hutch* contained a joke in a mouse-*racing sequence about "quarter* mice" ("quarter horses" is the popular name for sprint horses) which doubtless left the British viewers untickled. A British film in the States recently had the line "I last met him when he was a bouncer in a Gorbals knocking shop." It might well have been said in Greek for all the American audience made of it.

Under the spirit of both the *BBC Charter* and the Independent Broadcasting Authority contracts neither the BBC nor ITV programme companies are supposed to make programmes deliberately aimed at foreign markets, or even modified to do so. Sometimes this intention is adjusted a little (cries of protest, no, no, from television companies off-stage) but it is fairly well policed. The determined Britishness of shows is therefore something of a hindrance. During the Thames week in New York the delightful documentary about farm horses, *Daisy Bonny* . . . ., had to be subtitled because it was feared the audience would not understand rural accents. The word "bugger" in friendly reference to one of the horses was left untranslated.

HOW IT WOULD LOOK

What this autumn's television schedules would look like if both Britain and America could view each other's main channels.

		8.00		9.00		10.00	10.30
THURSDAY	ABC	Knotter	Barney Miller	Tony Randall	Nancy Walker	Streets of San Francisco	
	CBS	The Waltons		Hawaii Five-O		Barnaby Jones	
	NBC	Gemini Man		Best Sellers		Van Dyke & Co.	
	ITV	Movie		This Week	Frankie Howard	News	
	BBC1	Kojak		News	Sailor	Gangsters	
	BBC2	Diary of a Village	Book Programme	Movie		Movie	
SATURDAY	ABC	Holmes & Yo Yo	Mr. T. & Tina	Starsky & Hutch		Most Wanted	
	CBS	Jeffersons	Doc	Mary Tyler Moore	Bob Newhart	Carol Burnett	
	NBC	Emergency		Movie		Movie	
	ITV	Forrester		Within These Walls		Many Wives of Patrick	
	BBC1	Two Ronnies		Starsky & Hutch		News	Sport
	BBC2	Lively Arts		Lively Arts		Early Life of Stephen Hind	

The chart is based on the actual autumn schedules of the three American networks, the BBC and ITV. Knotter, Barney Miller, Holmes and Yo Yo, and Mr. T. & Tina are largely situation comedies. "Name" shows (Tony Randall) tend to be variety. The other titles are mainly drama series.

But even if all these problems *could be overcome, and the* Thames week has shown above all that American audiences are not as provincial as the networks sometimes paint them, there remains a major practical difficulty. American networks plan their years carefully and a long way ahead. British programming is far more fragmented. Apart from things like *Crossroads* and *Coronation Street*, the average British *series* rarely runs for more than 13 weeks. American networks normally want to know that there are at least 26 up-to-date *programmes available,* and preferably 104.

To prepare 104 episodes of *The Sweeney* or *Callan* would be *prohibitively expensive.* British peak time television *justifies an expenditure of not* more than £25,000 an hour as a rough average, although this is obviously broken frequently. To finance the sort of series that the Americans would be willing seriously to consider might therefore cost more than £2m. It is the sort of risk that Lord Grade has taken with *Space 1999*, and it is a risk which very nearly did not come off.

Fortunately for Thames it is now approaching the point where it has 52 episodes of *The Sweeney*, a programme which was popular with the New York *audience during the experimental* week. If this were sold to the networks the profits to Thames could be impressive. At *the moment* the networks will pay around $250,000, a little under £150,000 an episode for something like *Kojak* or *Hawaii Five-O*. It is unlikely that an import would get that but £100,000 might not be an unreasonable demand. On top of that come the second and third run syndication rights.

Figures like that give some clue to the enthusiasm of Thames and ATV to crack the American network market.

American networks are, however, in an extremely conservative mood at the moment. There was a general misjudgment of audience tastes last year (the big programme changes take place in September) and no one is in the mood for risk this season.

There are three network companies. CBS is the biggest, fol*lowed by NBC and ABC.* Although each owns one or two stations their existence is largely based on "affiliates"—stations which take the peak time service of the network company. These affiliated stations have considerable freedom to shop around. Thus the recent ability of the No. 3, ABC, to nibble at the ratings heels of the other two has tempted some affiliates to look to this com*pany as a possible alternative* to their present source of material.

The network groups themselves are eager to keep stations which are basically well managed and aggressive, thus providing a good advertising platform. At stake is the $2.5bn. which American advertisers spend on television each year.

It is the network judgment of the tastes of these affiliated *stations, which is important.* If a network company feels that *The Benny Hill Show*, while acceptable in New York, is too naughty for Atlanta or Omaha, that programme will not be bought.

This year's autumn schedules from the networks, which have plumped heavily for situation comedies and police shows, have come in for some biting comment from the critics, but it is a formula which may work well for audiences. British television, having just passed through what is generally regarded as a pretty poor summer both in audience and critical terms, has a strong emphasis on drama. At least two BBC series, *The Duchess of Duke Street* and *I Claudius* are potential money spinners on the export market with *Duchess* already showing signs of attracting an *Upstairs Downstairs* type of following.

These will almost certainly find their way into American public broadcasting which is where Thames has found a home for the one series it can claim to have sold already as a result of the New York project. *PBS has bought the rights to Rock Follies*, the drama series about the life of a female pop group. To complete Thames's delight PBS is to show the first programme during its Pledge Week, the time of the year when PBS appeals most strongly for funds and puts on the pro*grammes which it claims could* be shown in more abundance if there were more money.

The Sweeney

The main lesson for both sides is that the differences in the two markets are as important as the similarities. It is for this reason that the sale of a programme by Britain to the U.S. really is an achievement. *Sell The Sweeney to a* network and it will bring in more in one year than the export of 1,200 medium sized cars—and it would all be profit

Letters to the Editor

Attitudes of mind

m Professor Leslie Rodger.

ir. — Over - government and er - investment — the two are unrelated—are symptoms of British disease. Both reflect attitude of mind that results too many people taking more of the system than they are pared to put into it.

Many workers, unionised or erwise, are guilty of it by not ing a fair day's work for a ir day's pay, even when they at work. Small groups of workers can put thousands of work and lose millions of nds worth of productive put.

Government is guilty of it by ing too much out of the nomy in the way of resources l not putting enough back in he way of encouragement and d incentives to productive erprise. The things that it s in too much of are conints, restrictions, legislation, productive manpower and dy political dogma. For mple, the latest NEC prols to nationalise the major ks and insurance companies ay a horrendous misunderading of how the investment cess really works.

Many businessmen take more of the business than they put k in in the way of investment plant, machinery and future . Bad accounting methods, ecially in this inflationary ude, are partly to blame. Too companies have adopted rement value accounting. The ernment has failed to create climate of profitability conive to investment. Governt and union preserve-jobs-atcost policies have discourd investment in up-to-date hinery and technology.

Academics are guilty of it too, re are skivers in the uniities and colleges just as re are in any other type of anisation. There are profes- and lecturers who take out od deal more than they put

As a profession we are bably neither better nor worse n anybody else.

Three things are necessary if are to dig ourselves out of hole we are in instead of ing the hole bigger and per:

Enterprise

recognition that productive erprise is ultimately the sole rce of community wealth. re is no evidence to show state-controlled enterprise is er more efficient or more ountable when it comes to ng the job than is responsible ate enterprise. Indeed, the erse may be true. If our itical masters do not absorb lesson and absorb it quickly shall certainly end up the r men of Europe and maybe a much larger part of the he than that.

political decision to effect ajor transfer of resources into ductive enterprise of every t. Only in this way will we a nation be able to afford further accumulation of ial capital. The present cutk in central and local governnt expenditure, affecting a e range of social and educaal services and amenities, vides an object lesson for our ional housekeepers. Governnts can only dispose of reirces. They cannot create them l they certainly cannot allocate at isn't there.

MPLT—More Put, Less Take, in everybody. But this can y work if the government es a hard look at the present incentives to harder work. We at war as a nation, with selves; a war which is more idious than any we have ever ight.

One maybe cannot expect the present Government to publicly avow the first premise. But on a purely pragmatic view, can it honestly deny the last two and the need to make a clear declaration of intent now?

L. W. Rodger.
Dept. of Business Organisation.
Heriot-Watt University.
31-35 Grassmarket, Edinburgh.

Who's in charge?

From Mr. D. Natusch.

Sir,—The article by your Motor Industry Correspondent on September 17 about the proposed Leyland Mini admirably highlights Leyland's problems—and not only those connected with the Mini. If I may quote extracts:

. . . plans for a new Mini were finally given the go-ahead by the group's main board . . . the *plans for the car* ( ) now have to go for approval to the National Enterprise Board . . . there will be further discussions with the Department of Industry . . . there are *considerable* forces against the vehicle both within the NEB and the Government . . . The Treasury has ( ) made its opposition to the project known . . . etc. . . etc.

I would have thought two things were painfully clear in this situation. If the management of Leyland is not actually managing the company, then there can be no hope that it will ever become viable. If there is *any gentlemen in the Treasury* better able to manage Leyland than its present management then he should immediately be drafted to Coventry. If not, then his views on the subject are of no interest outside the bar of his local.

D. A. Natusch.
Pine Croft, Bridge Hill,
Belper, Derbyshire.

A lack of incentive

From Sir Ian Bowater.

Sir,—Surely it is time that someone pointed out to the Treasury that industry will not and cannot borrow for investment on the basis of the banks' minimum lending rate of 13 per cent. The only possible way to re-fuse expansion and therefore increase employment is to provide cheap money and reduce taxation. Without these two *ingredients recovery will not take* place.

At present there is neither incentive for industry to expand nor for people to invest. *Without investment short of compulsion* the future is indeed bleak. The way to recovery for the pound is to stop spending on seemingly endless bureaucratic expansion on wasteful non-productive schemes.

Ian F. Bowater.
Husher House, Woollen Firs,
Maidenhead Thicket, Berks.

Change in Rhodesia

From Mr. G. D. Hawkins.

Sir,—As a Rhodesian I feel your correspondent ("Men and Matters," September 21) is mistaken in suggesting that Mr. Smith is not to be trusted, and that this widely accepted deficiency of character is the greatest threat to a successful conclusion to Dr. Kissinger's initiative. It should be remembered that in past negotiations much also depended upon the Rhodesian view of the man who faced Mr. Smith. The Rhodesians did not show bad faith when dealing with Sir Alec Douglas Home. That arrangement collapsed because it was unacceptable to the Africans and this, surely, is still the greatest danger — hence the crucial importance of persuading Presidents Nyerere and Kaunda to ratify whatever formula the Secretary of State can devise.

By all accounts, Sunday's talks were a dignified affair and Dr. Kissinger did not find it necessary to insult the Rhodesians. On the contrary, a degree of mutual respect appeared to be present which was absent in past negotiations apart from those conducted by Mr Heath's government. I believe that Dr. Kissinger may succeed with the white Rhodesians because of this, and because of three other vital and well publicised factors — the deteriorating military and economic climate in Southern Africa as a whole, the radically altered view of Mr. Vorster, and the possibility of a new, and less sympathetic, U.S. administration taking charge in the New Year.

One hopes the average white Rhodesian will see, as Mr. Smith and his team surely have, that *this would be the appropriate* moment to step down. It will then fall to Britain and others to help implement the agreed formula with compassion and decency. The irrelevant moral posturing which has come so easily to non-combatants must cease lest it be counter-productive.

G. D. Hawkins
26, St. Mark's Crescent, N.W.1.

Unhappy returns

From Mr. H. Glaister.

Sir,—I regret to say I have found a further discrimination against the self-employed.

Anyone who is 70 during the tax year 1976/77 must take his state pension on his 70th birthday—*self employed or not.* If he is self employed however and his income is assessed at £4,900 or more he will be required to pay a class 4 contribution to the Inland Revenue of £264, who will pay this to the Ministry of Health and Pensions. This is a pension contribution.

Should he be 70 in the middle of April 1976 he will cease to put a £2.41 stamp on his card on his birthday, but the £264 is demanded in full—£264 for two weeks contribution.

Who else has to pay pension contributions after retirement?

Howard Glaister.
5, Etterby Lea Crescent,
Stanwix, Carlisle.

Conserving water

From The Marketing Director, Gummers.

Sir,—I have read with interest the letter from Mr. B. H West (September 13) and at least in part, can provide an answer to his query.

It will be understood that due to environmental changes and compelling commercial necessity, it has only recently become "official policy" to pursue "*conservation*" and, in association with water, this has been influenced more by the cost of heating it rather than particular concern for protecting water supply sources.

As a company we have been offering a number of products for many years with conservation in mind, for example, a single hole combination spray tap such as described by Mr West and additionally a pressure reducing valve for direct connection from *the mains to appliances and last,* but by no means least, a flushing valve which replaces the conventional flushing cistern. The conservation appeal of this device does not need selling to British Rail which is restricted *by water carrying capacity on* passenger rolling stock and has long seen and adopted the advantages claimed for such a valve. The flushing valve is capable of being pre-set to 1, alternatively $1\frac{1}{2}$ or 2 gallon discharge and as a product is not more widely popular in the U.K. due to the "traditional" attitude of water engineers in general who fear what they consider to be the "running-on" potential of the main valve.

Manufacturers such as ourselves have long been pointing out that this is no more likely to happen than a conventional float valve malfunction where the same situation would result in water running to waste. Certainly British Rail has no maintenance problems in this regard from a low pressure system nor do our neighbours in the EEC who predominantly use the flushing valve in association with high pressure direct from *mains.*

Naturally, we hope that the current water crisis leads to a more objective study of the advantages offered from products which have long been available from a number of U.K. manufacturers.

B. H. Kendrick.
Effingham Valve Works,
Rawmarsh Road,
Rotherham, South Yorkshire.

Uprating pensions

From Mr. P. Jenkin, MP.

Sir,—Mr. Jack Jones and I have indeed both criticised the Government's sleight of hand over this autumn's pensions *uprating (Eric Short's article of* September 15) but there our "common cause" ends.

Unlike Mr. Jones, I have not tried to curry favour with pensioners by trumpeting that the Government ought at once to make up the increase to the full 22 per cent. (let alone without saying how it should be paid for). My charge against HMG is that having promised to protect pensioners against inflation, the Chancellor's appalling extravagance has made it quite impossible for it to honour its promise. Indeed, before the Budget my colleagues and I had already come to the conclusion that reneging was inevitable: the only question was whether Mrs. Castle would honestly admit her failure and amend the Act, or whether she would bluster and fiddle her way through. Of course, characteristically, she chose the latter course.

My message to pensioners is that pensions can be increased *only* if the nation's economy produces the necessary increased resources. The Labour Party's pension promises have never been honoured because a Socialist economy never produces the goods. The pensioners know that Mr. Heath's Government did not let them down. *Nor will the next Government* led by Margaret Thatcher.

Patrick Jenkin.
House of Commons, S.W.1.

The shadow of Flixborough

From Mr. W. Wilson.

Sir,—Your leading article "The Shadow of Flixborough" (September 14) and the report with which it deals foreshadows, I think, more control, more laws and more people to ensure the application of both. And, of course, *no matter what is said* or done, accidents will still occur and so, on previous practice, a further endeavour will be made to plug the holes represented by the new failures. On the whole it seems an unprofit*able approach,* being wholly based on the wisdom of hindsight and playing safe.

It would be wiser, I suggest, to limit the business to a simple, formal and workable proposition, namely that all engineering design and construction should be undertaken and supervised by properly trained, qualified and experienced professional engineers who should, moreover, be appointed to take legal responsibility for what they have to do.

Such associations occur in other professions to a greater or lesser degree—the law and medicine to quote only two. On the whole, accidents of the Flixborough magnitude are not frequent events, indeed, to the contrary, fortunately are rare. But this is not wholly a matter of good fortune; it is primarily because the great chemical firms are responsible organisations which, on the whole, take considerable precautions *to ensure* sound design and construction. All I am suggesting is a proposition that takes their general attitudes one stage further.

Regulations are not, in my opinion anyway, the answer, to man's fallibilities and might indeed be eschewed as a first step *in favour of self-discipline.* As a passing thought, did the Building Regulations (approximate weight $1\frac{1}{2}$ lbs. and a printed area of 240 square feet) prevent the Ronan Point failure, problems with cement (HAC) and structural collapse here and there? And did they further good design, for instance in the field of energy conservation?

W. L. Wilson.
Oakwood,
34, Chestnut Avenue,
Chorleywood, Herts.

Loans to directors

From Mr. R. Instone.

Sir,—It is somewhat surprising that, so far as appears from your summary (September 15) of the Slater Walker documents, consideration has been given to possible breaches of section 54 of the Companies Act 1948, but not *of sections 190 and 197 of that* Act.

Loans by a company to its own or its holding company's directors are made prima facie *unlawful* by section 190. They are not rendered lawful by reason only that the lender is a banking company whose ordinary business includes moneylending, *to be lawful,* they must also have been made in the ordinary course of the moneylending business.

You report that, of loans outstanding at October 31, 1975, *from the banking subsidiary to* the then directors of its holding company amounting to £585,000, less than half, namely, £223,000, were house mortgages. The terms of these may have been indistinguishable from house mortgages to non-director staff; but there is nothing in your summary which supports, and much which negatives, any contention that house-mortgage loans, to say nothing of the other loans to directors, were part of the "ordinary *business*" of the in-house bank—if indeed it had any "ordinary business" other than, as found by the investigating accountants, "to service the needs of the group and the group's clients."

Loans to directors which are rendered unlawful by section 190 are required by section 197 to be particularised in the accounts. One lesson to be drawn from the Slater Walker story is, surely, that more attention needs to be given by both managements and *auditors to the double test propounded* by both sections.

Ralph Instone.
13, Old Square
Lincoln's Inn, W.C.2.

To-day's Events

GENERAL

Prime Minister opens International Machine Tool Exhibition, National Exhibition Centre, Birmingham, and is expected to make major policy speech.

TUC General Council meets.

French Prime Minister expected to announce measures to stabilise country's currency.

Mr. Albert Booth, Employment Secretary, speaks at National Cold Storage Federation lunch, Inn on the Park, W.1.

Viscount Watkinson, CBI president, speaks at its Scottish Region annual lunch, Glasgow.

EEC Commission discusses proposal for sanctions on employers using illegal immigrants, Brussels.

CBI publishes full results of study into employees' attitudes *under title "Priorities for In-*Company Communications."

One-day London conference jointly sponsored by British Overseas Trade Board and CBI: "How to Succeed in Japan—by Really Trying."

Chartered Insurance Institute annual conference begins, Coventry.

Sir Lindsay Ring, Lord Mayor of London, attends Basketmakers' Company dinner, Mansion House, E.C.4.

OFFICIAL STATISTICS

New vehicle registrations (August).

COMPANY RESULTS

Booker McConnell (half-year). Laporte Industries (half-year). Rio Tinto-Zinc Corpn. (half-year).

COMPANY MEETINGS

Boardman (K.O.) International, Manchester, 12. Firth (G.M.) (Metals), Bradford, 11.30. Hambro Trust, 41, Bishopsgate, E.C., 11.15. LRC International, London Press Centre, E.C., 12. Property Security Investment Trust, Abercorn Rooms, E.C., 12.15. Sena Sugar Estates, 654, Fulham Road, S.W., 12.30. United Dominions Trust, 14-20, St Mary Axe, E.C., 12.

COMPANY NEWS + COMMENT

James Finlay up to £2.17m. at half time

INTERNATIONAL traders and financiers, James Finlay and Company, lifted pre-tax profits from £1,406,000 to £2,167,000 in the first half of 1976 and the directors say the full year result will be good and the maximum permitted dividend total will be paid. Last year's profit was £3.76m.

After tax of £1,005,000 compared with £787,000, first-half earnings are shown to be up by 34.7 per cent. from 7.2p to 9.7p per 50p share and the interim dividend is raised from 2.0036p to 2.75p net. The second interim for 1975 was 3.45p for a 5.4536p total.

In line with previous interim reports, the figures relating to the plantation interests of subsidiary and associate companies in India and Bangladesh have been omitted, as with less than half of the crops having been produced and sold by the end of the half-year they would provide no reliable indication of performance or prospects for year as a whole.

	Half year 1976 £000	Half year 1975 £000	Year 1975 £000
Turnover	20,390	19,342	25,177
Trading profit	2,000	[illegible]	1,021
Share associates	161	326	2,172
Pre-tax profit	2,167	1,406	3,763
Tax	1,005	787	2,030
Pre-acq., minorities and pref.	154	25	41
Leaving	958	647	1,692

* Excluding plantation interests in India and Bangladesh. † Credit

The directors report that the bulk of the interests made further advances in the first half. The international finance house achieved further profit growth. Continued recovery was also made by the tea trading and confectionery activities and the new American operations in particular. The historic tax losses for the two last-mentioned activities reduced the charge. The results have also benefited from the disposal of most of the investment in the hitherto loss-making Canadian food companies.

With regard to plantation activities in India and Bangladesh, they say that while cost inflation continues, crops are good and satisfactory results should be achieved if current selling prices for tea are maintained.

• comment

After the re-organisation at James Finlay it is probably fairest to take earnings per share as the indicator of performance. These have risen by 34 per cent. as profits improve in most areas. However, the shares are still rated below most other overseas traders largely because of two major problems. Firstly, the protracted negotiations over "rupeeisation" of the Indian tea interests (Asia acounts for more than a third of net tangible assets and a significant write down is expected when "rupeeisation" occurs) and secondly the 22.30 per cent. stake of Slater Walker which still overhangs the narrow market. Last week SW announced that this was for sale but it would be surprising, given the other disposals, if the stake had not been unofficially on offer before. Possibly the two problems are connected—potential buyers might be nervous of the Indian interests. The prospective yield on the shares at 128p is 7.4 per cent.

INDEX TO COMPANY HIGHLIGHTS

COMPANY	Page	Col.	COMPANY	Page	Col.
Bandanga Holdings	30	7	Laurence Scott	29	2
Bank of Scotland	31	3	Law Land	30	1
BICC	29	6	Leadenhall-Sterling	28	4
Bodycote Intnl.	28	2	Matthews (Bernard)	31	6
Brown Muff	31	7	Metalrax	29	2
Eagle Star	29	1	Morrison (Wm.)	29	4
Finlay (James)	28	1	Pittard Group	28	4
Giddings & Lewis	28	6	Reed & Mallik	31	4
Gripperrods	28	4	Sale Tilney	28	3
Haggas (John)	30	7	Scholes (Geo. H.)	29	8
Heywood Williams	29	8	Sheffield Twist	30	2
Hillards	31	4	Watts Blake Bearne	28	5
Jentique	29	3	Wilkes (James)	29	7

Bodycote slips in first half

PRE-TAX PROFIT of Bodycote International, the Manchester-based textiles group, fell from £840,000 to £707,000 in the half year to June 30, 1976, but chairman Mr. Joseph Dwek describes the prospects as encouraging.

With consumer demand now expected to improve following the income tax concessions in August, pension increases and the greater use of consumer credit the directors hope that the group will be able to take advantage of a better trading climate to produce "another good result" he adds.

Earnings are down from 5.22p to 4.43p per 5p share. The interim dividend is 1.1666p net (1.1665p adjusted), and will absorb £92,106 (£91,845).

Turnover in the half-year was marginally lower at £11.07m. compared with £11.19m. Tax was reduced from £429,000 to £357,000 leaving the net profit down from £411,000 to £350,000.

In the year 1975 pre-tax profit was a record £1.71m. and dividends totalling the equivalent of 2.2165p net were paid.

In his annual statement in May Mr. Dwek said that the problems of the past year had been carried over into 1976 and as result trading in the first quarter had been very mixed. Certain sections of the group had started to emerge slowly from the recession, led by the overseas subsidiaries where demand had begun to improve substantially.

Mr. Dwek now states that the interim results reflect a satisfactory performance in difficult times. The industrial protective clothing and safety products division and, in particular overseas subsidiaries, had a better than expected first half, emerging strongly from the recession of 1975. Trade continues to remain buoyant and their forward order position is now good, he adds.

While the industrial sectors continue to make steady progress, those subsidiaries selling to the retail trade were adversely affected by the decline in consumer spending in the second quarter with the result that their profit contribution was comparably reduced.

• comment

Despite a strong trend in Holland and in protective clothing—now accounting for 50 per cent. of profits against nearer 33 per cent. —Bodycote's first-half profits are some 16 per cent. lower. The laggard has been the general textile activities reflecting the slump in demand at the retail end. While the retail trade is continuing to feel the pinch, total orders at Bodycote are evidently higher than a year ago. There are areas within the group that are still giving a below average return on capital employed and some weeding out is on the cards, with the cash being used to expand more profitable activities. It is the strength of these diversified interests that keep Bodycote on a slight premium rating to the general textile sector with the shares at 32p, yielding about 10 per cent.

Sale Tilney jumps 77% at midway

REPORTING a 77 per cent. jump in pre-tax profits from £266,000 to £472,000 for the six months to May 31, 1976, the directors of Sale Tilney and Company say there is every indication that the full-year profit will be substantially greater than the £684,000 achieved in 1974-75.

The Board is continuing to explore opportunities for the further expansion of group activities through acquisitions and internal growth, they add.

The interim dividend is raised from 2.07p to 2.27p net per 25p share costing £38,500 (£35,100). Last year's final payment was 2.25p.

First-half turnover rose from £18.75m. to £19.87m. Tax absorbed £255,000 (£146,000).

The group's industrial division designs and manufactures special purpose machinery etc., while the distribution and production division manufactures, processes and distributes sugar, confectionery, jams, canned meats, etc.

Pittard doubles at halfway

SALES OF leather tanners and dyers, Pittard Group, expanded from £4.8m. to £6.85m., and pre-tax profit doubled to £741,596 in the first half of 1976.

And the directors state that there is no reason to suppose that the results for the second half should not be better than those of the first. Profit for the year 1975 was £1,012,692.

The interim dividend is effectively raised from 0.833p to 1p net, and it is intended to pay the maximum permitted—2.25625p for 1975.

	Six months 1976 £	Six months 1975 £
Sales	6,851,249	4,800,361
Profit before tax	741,596	371,077
Taxation	382,130	191,179
Net profit	359,466	179,898
Interim dividend	71,273	67,002

The figures show the continuation of the recovery in growth and profitability shown by the 1975 accounts, it is stated.

Of the sales, 49 per cent. were overseas, an increase of 84 per cent. over those for the same period last year. Sales in the home market, although disappointing compared with the export performance, show an increase over last year. Home sales have not been as buoyant as the directors would have wished, mainly because of a depression in some sections of the shoe trade which have been affected by the importation of cheap shoes from the Comecon countries.

The result was achieved despite difficulties of rapidly escalating hide and skin prices and the continuing inflation.

The export drive continues and since the date of the accounts there is further evidence of the success of these efforts, the directors add.

• comment

Pittard's interim profits are 15 per cent. up on the buoyant 1975 second half and suggest that group is at last headed for a full year total in excess of the £1.37m. peak of 1972. Full year earnings look set to reach about 16p per share (against 10p previously), putting the shares, which jumped 8p on the results to 47p, on a p/e of less than 3. The group's concentration on exports over the past three years is now paying off in a big way particularly in Germany and Finland where sales rose respectively by 250 per cent. and 400 per cent. Net borrowings have been roughly doubled since the last accounts but with half-time gearing running at around a third of net worth, the balance sheet does not look overstretched. The U.K. is still slightly depressed and signs are that growth in North America (45 per cent. of exports in the first half) is beginning to ease. However, the group is confident that the European markets still have plenty of potential.

Progress at Leadenhall Sterling

On turnover of £2.43m., pre-tax profits of Leadenhall-Sterling Investments reached £218,000 for the first half of 1976. This compares with £2.93m. and £242,000 respectively for the nine month period to end 1975.

The directors say the group continues to trade satisfactorily and the second half should show further improvement given normal trading conditions.

First half earnings are shown at 7.9p per 25p share against 9p for the previous period. The interim dividend is 1.485p net and the directors anticipate paying a maximum permitted final of 2.173p. Dividends for the nine month period in 1975 were 2.494p.

Profits included no franked income (£42,000). Tax takes £37,000 (£59,000).

The group's ultimate holding company is British and Commonwealth Shipping.

Gripperrods expansion

In a statement on the results of Gripperrods Holdings for the year ended April 30, 1976 (reported September 3), group chairman Mr. J. L. H. Cowan says that the group's main trading subsidiary, Gripperrods International, has continued to expand both turnover and profits. During January, 1976, additional factory premises were purchased adjacent to the main manufacturing unit in Horsham to ensure continuity of expansion.

The company has recently purchased a manufacturing plant which is currently producing carpet underlay and this product, together with other complementary lines, will be marketed during the current year.

Due to the world-wide recession the overseas subsidiaries' profitability fell somewhat short of anticipated expectations, Mr. Cowan says.

The South African subsidiary, Gripperrods South Africa (Pty.), has been subject to some re-organisation with a view to reconciling operations in line with general conditions in that country.

The first stage of the building reconstruction programme has been completed at Versatex—the engineering division—and the re-equipping with more sophisticated machinery continues.

The current and subsequent year must be viewed with prudent optimism, says Mr. Cowan. So far this year, demand has shown improvement, mainly due to the company's increased market share. The economic climate is still uncertain, however, and Government action has already adversely affected consumer demand, the chairman says.

The company's policy is to remain competitive, says Mr. Cowan, and this, together with the escalation in the costs of raw materials, could exert pressure on profit margins.

In the year under review, the group made pre-tax profits of £723,359 (£653,151) and paid total dividends of 3.4684p (3.212p) net per 10p share.

Economies effected, including the limitation and redeployment of manpower, in anticipation of the depression, had beneficial results on profitability. These, together with the benefits of a substantial export trade transacted in currencies other than sterling, resulted in the increase in profits, after having reserved £135,000 to offset the effects of inflation upon provision for pensions.

During the period, development work was continued to make provision for a greater offtake in the years 1977 and 1978, including, at the end of the first half, the recruitment of additional employees in departments which had become depleted. The substantial programme of capital expenditure is well on target, says the chairman. The company produces ball and china clay.

DIVIDENDS ANNOUNCED

		Current payment	Date of payment	Corre-sponding div.	Total for year	Total last year
Bandanga	int.	1.73	Oct. 22	1.57	—	3.17
Bank of Scotland	int.	4.78	—	4.43	—	8.87
BICC	int.	2.25†	Jan. 4	2.25	—	6.61
Bodycote Intl.	int.	1.17	Nov. 30	1.17*	—	2.22*
Celtic Haven		0.26	Nov. 1	Nil	0.26	Nil
Eagle Star Ins.	int.	2.75	Jan. 14	2.5	—	4.99(b)
Jas. Finlay & Co.	int.	2.75	Dec. 8	2	—	5.45
John Haggas		2.02	Nov. 23	1.93	3.02	2.77
Hamilborne	int.	0.5	Dec. 13	0.5	—	1.39
Jentique		0.31	—	0.28	0.33	0.49
Law Land	int.	1	Nov. 15	1	—	2.32
Leadenhall Sterling	int.	1.49	Jan. 4	0.96	—(c)	2.49(d)
Bernard Matthews	int.	3.5	Nov. 2	1.5	—	7.51
Metalrax	int.	0.44	—	0.4*	—	1.01*
Pittard Group	int.	1.0	Jan. 3	0.83*	—	2.26*
Ricardo Engineers		3.98	—	3.44	5.85	5.32
Sale Tilney	int.	2.27	Nov. 29	2.07	—	4.32
G. H. Scholes		10.85	Nov. 17	9.5	14.85	18.5
Watts, Blake, Bearne	int.	1.0	Nov. 15	0.85*	—(a)	1.91*

Dividends shown pence per share net except where otherwise stated.
* Equivalent after allowing for scrip issue. † On capital increased by rights and/or acquisition issues. (a) Final of 1.1p intended. (b) Final on increased capital (c) Final 2.173p anticipated. (d) For nine months.

Watts Blake midterm upsurge

ON EXTERNAL sales up from £5.81m. to £6.82m., first half 1976 group pre-tax profit of Watts, Blake, Bearne & Company expanded from £0.78m. to £1.15m. The figure for the year 1975 was £1.62m.

The directors look forward to reasonably good trading conditions in the next two years, bearing in mind that the second half of the current year, as usual, is affected by slack trading conditions during the holiday period. They are also mindful of the continuing rise in costs over which they have little or no control, says the chairman, Mr. C. D. Pike.

The interim dividend is effectively raised from 0.85p to 1p net per 25p share, and a final of 1.1p (1.0592p) is intended. Earnings per share for the half year increased from 4.81p to 7.23p.

	Half year 1976 £000	Half year 1975 £000	Year 1975 £000
Home sales	2,804	1,554	3,211
Export & overseas	3,079	4,231	8,904
Total external sales	6,823	5,806	12,115
Profit	1,616	1,178	2,477
Depreciation	461	397	853
Profit before tax	1,155	781	1,624
Corporation tax	555	361	761
Foreign tax	65	79	124
Net profit	535	365	739
Preference dividend	3	1	6
Interim Ord	76	65	145
Retained	474	300	588

Trading was very much as anticipated, with the home market volume being well maintained, and the export market showing a gradual upturn in activity, says Mr. Pike.

• comment

After its 48 per cent. increase in pre-tax profits at half-time, Watts, Blake, Bearne and Co. look set to achieve the £2m. level at least by the end of the year. This would put earnings per share on the increased capital at more than 13½p and cover a maximum yield of 3 per cent. on the 104p shares six times. The group makes no secret of the fact that much of its recent improvement in margins is the result of a decision last year to invoice its exports in foreign currencies and that no substantial gain in trading profits is expected until the 1980s. However, in view of the group's partial vulnerability to U.K. public expenditure cuts affecting the building sector, it has done well to maintain volumes sales in the home market. The group is also looking for an improvement in clay exports to the Continent towards the end of this year after a small volume decline in the first half.

Giddings & Lewis-Fraser

On a turnover down from £3.45m. to £2.76m., pre-tax profit of machine tool manufacturers, Giddings and Lewis-Fraser increased from £244,228 to £310,310 in the first half of 1976. Profit for the year 1975 was £498,000.

ISSUE NEWS AND COMMENT

Mid-Sussex Pref. and Debenture

Brokers Dennis Murphy, Campbell and Co. have completed arrangements for an offer for sale by tender of £2m. of 8 per cent. Redeemable Preference Stock 1981 in Mid-Sussex Water Company at a minimum price of £92½ per cent. At the same time a placing has been arranged of £1.5m. of 14½ per cent. Redeemable Debenture Stock 1982 at £97 per cent.

The Preference stock is payable as to £10 per cent. with tenders to be received not later than next Tuesday and the balance on or before Thursday, October 28.

The first dividend amounting to £2.937 net per cent. is due on March 8, 1977, and thereafter dividends will be payable half-yearly on September 8 and March 8.

At the minimum issue price the stock will yield a grossed up 13.306 per cent. flat or 14.679 per cent. to redemption.

A second tranche of £150,000 of the Debenture stock will be made available in the market until noon on Thursday and dealings are expected to start fully paid on Friday. At the issue price of £97 per cent. the flat yield is 14.948 per cent. and the redemption yield is 15.281 per cent.

The net proceeds of the two issues will be used to redeem the existing £1.2m. of 5.03 per cent. Redeemable Preference stock and to defray part of the programme of capital works estimated to cost £7m. by 1980.

• comment

A combination of a preference stock and a debenture from Mid-Sussex is somewhat of a surprise, but the format is evidently to maintain the relationship between borrowings and capital. Also a debenture brings in a different type of investor. Those after franked income usually go for the water preference issues, whereas gross funds and insurance companies will be interested in the debenture. A new debenture is a rarity these days and the issue will undoubtedly meet with a favourable reception with a premium developing when dealings commence. Meanwhile demand for the preference may be a little less enthusiastic though the underwriters should have no worries. Based on existing stocks in the market a tender price pitched ahead of the minimum—say £93—looks a fair bid assuming that the fixed interest market does not deteriorate between now and next Tuesday.

Local loans at 12⅞%

The coupon rate on this week's batch of local authority yearling bonds is unchanged at 12⅞ per cent. at par. The issues are due on September 28, 1977.

This week's issues are:—London Borough of Brent (£½m.), Medina Borough Council (£½m.), Northavon District Council (£½m.), Crawley Borough Council (£½m.), Oldham Metropolitan Borough Council (£1m.), Birmingham District Council (£3m.), Borough of Chesterfield (£¾m.), City of Bath (£½m.), Bournemouth Borough Council (£½m.), Newbury District Council (£½m.), City of Newcastle Upon Tyne (£1m.), Northamptonshire County Council (£½m.), Preston Borough Council (£½m.), Borough of Sunderland (£1m.), Metropolitan Borough of Wigan (£1m.), London Borough of Ealing (£1m.), London Borough of Hillingdon (£1m.), Castle Point District Council (£½m.), St. Edmundsbury Borough Council (£½m.), Orkney Islands Council (£½m.), Mole Valley District Council (£½m.), Rossendale Borough Council (£½m.), Ribble Valley Borough Council (£½m.), Aylesbury Vale District Council (£½m.), London Borough of Richmond-upon-Thames (£1m.), East Lothian District Council (£1m.).

LONG TAP

The prospectus is published to-day in connection with the issue of £800m. of 14½ per cent. Treasury Loan 1994 at £96.50 per cent.

The list of applications will open and close on Friday 24, and the issue is payable in full on application.

BAT U.S. offshoot liquidated

BAT Industries, the big tobacco and industrial group, has liquidated Yardley of London Incorporated, a U.S. cosmetics subsidiary, creating a capital loss in its U.K. taxation structure, Mr. Eric Morgan the chairman of Yardley, said yesterday.

BAT has for some years been re-organising its U.S. cosmetic interests, where its Yardley, Germaine Monteil and Lentheric businesses are all represented. They are all now grouped under the Monteil company.

Mr. Morgan added that the liquidation of Yardley of London Incorporated helped to simplify the structure. "This is a legal entity and tax tidying up move. It doesn't affect marketing behaviour at all. Nor does it impinge on the Yardley business in other parts of the world."

Ricardo Engineers

Pre-tax profits of Ricardo and Co. Engineers (1927) expanded from £340,146 to £412,123 for the year to June 30, 1976 after a rise from £138,921 to £173,946 in the first half.

The final dividend is 3.975p net per 25p share, lifting the total from 5.31753p to 5.85p.

Eagle Star advances to £15.8m. at six months

ESTMENT income for the half of 1976 at Eagle Star rance Company increased by per cent. to £14.6m. and, de- e an underwriting loss of m. compared with a profit of m. last time, pre-tax profits anced from £12.9m. to £15.8m. he interim dividend is lifted n 2.5p to 2.75p net costing m. on capital increased by December's one-for-four its issue. On present indica- s the directors expect to pay maximum permitted for the r. Last year's final was 2.487p the increased capital.

	First half 1976 £m.	First half 1975 £m.	Year 1975 £m.
mium income*	530.4	464.4	901.0
income	14.6	10.5	22.6
rewood Secs.†	2.4	0.7	2.6
associates	0.5	0.5	0.8
rwriting loss	2.4	0.1	2.7
profits	3.1	2.7	6.2
oan. ints etc.	2.4	1.6	3.3
its before tax	15.8	12.9	26.0

*Excluding life. † Acquired during Profit.

he increase in investment in- e was achieved, despite htly lower rates of interest on rt-term deposits. This was sted not only by a strong cash but also by the investment the rights issue proceeds and movements in exchange rates. er adjusting for the effects of rights issue and differing ex- nge rates investment income the period increased by 21 cent.

etails were given on May 26 the purchase of investment perties from English Property poration which improved the ance of the property content the investment portfolio. The up's liquidity in the form of rt-term deposits still remains h, members are told.

Grovewood Securities has shown roved profits and the in- asingly successful operations that company are now making gnificant contribution to group nings, say the directors.

n the U.K. after a bad start re was a continuing improve- nt in underwriting results ich overall were profitable. The erience of the fire account was isfactory. Although the heavy t of the January storms was vided for in the 1975 accounts result of the "All-in" account s again unfavourable. The ts of personal injury claims ntinue to increase but the ounts mainly concerned, nely motor and liability, were erall profitable, the directors ort.

Overseas underwriting losses re exacerbated by the depre- tion in sterling but the conse- ential improvement in invest- nt income from overseas in- rance operations has more than mpensated for this.

Australia continues to show a ady and progressive reduction the scale of its underwriting s. In South Africa the under- iting trend is showing improve- ent after a poor beginning to e year. In the U.S. where ex- sure is relatively small, ringent action has been taken contain the loss. Experience Belgium, in line with the arket generally has deteriorated lsewhere overseas, improved esults are being achieved.

In the marine and aviation ccount, also affected by the de- preciation of sterling, competi- tive pressures are inhibiting the necessary increase of premiums with the result that the surplus emerging from the 1973 account will probably be retained within the fund.

New life sums assured for the six months totalled £437m. against £277m., of which £352m. (£212m.) arose in the U.K. There has been a corresponding increase in the new yearly U.K. premiums of 74 per cent. and single premiums of 34 per cent. resulting mainly from substantially increased pension business.

See Lex

Metalrax lower at halfway

ANNOUNCING a drop in pre-tax profit from £407,505 to £316,446 for the first-half of 1976, Mr. John Wardle, chairman of Metalrax (Holdings), forecasts "a distinct improvement for the second half."

The net interim dividend is effectively raised from 0.40p to 0.44p a share. Last year's equiva- lent total was 1.0136p from record pre-tax profits of £812,524.

Turnover is down from £3.351m. to £3.17m. at half-way. Tax takes £167,000, against £214,000.

In his annual statement in April Mr. Wardle said the group's strength was such that against the general background of the re- covery indicated for the second half of 1976 it would make a good showing. But it appeared inevi- table that at least in the first half of the current year it would not be able to achieve the level of profitability in 1975.

Mr. Wardle now states that, con- sidering the difficulties of the economy and the below-capacity working of most subsidiaries, this first dip in 10 years was not unex- pected and in line with internal budgets.

"However, there is marked evi- dence of an improvement in the level of both orders and future inquiries in the majority of our subsidiary companies," he adds.

In view of the delay in the general improvement of industry, however, "it may not be possible to make up the ground which has been lost in the very difficult first half of this year."

Metalrax (Holdings) comprises an integrated network of 18 engineering companies, mainly in the Midlands, the North West and South Wales.

Laurence Scott looks for record

At the annual meeting of Laurence Scott, Mr. P. M. Tap- scott, the chairman, stated that having almost completed six months of the current year, management accounts currently available showed that results in aggregate were close to budgets.

He therefore expected the half yearly statement due in Decem- ber "to read well."

It was too early to forecast the full year's results the chairman said, beyond indicating that "it should be a financial record by a useful margin."

The chairman said that the group's problems were largely centred around an adequate 1977- 1978 load for the heavy motor works, although there had been some small improvement in the flow of orders very recently. How- ever, heavy investment had to be made urgently in water in this country, he said: the steel industry also would benefit from more modern plant and investment in North Sea oil could only be going through a lull likely to be broken early next year. Prospects, there- fore, could not be considered to be bad.

Mr. Tapscott also referred to assistance under the Industry Act in connection with heavy capital investment at the various works. Plans for modernisation of the sheet metal manufacturing facili- ties have now additionally been accepted, he said, and agreement regarding proposals for invest- ment at the Norwich foundry should soon be reached.

Jentique downturn to £0.54m.

TURNOVER FOR the year to June 30, 1976 of Jentique (Hold- ings) increased from £7.30m. to £8.44m., while pre-tax profit decreased from £682,930 to £539,082, after £311,670, against £330,400, at midway.

Earnings per 5p share for the year were down from 1.21p to 0.98p. A final dividend of 0.30949p lifts the total from 0.4824p to a maximum permitted 0.53471p net.

The directors report that the group is in sound financial position.

The major contribution to profit was derived from furniture in a period when clock turnover was at a reduced level.

Current year for clocks has started well, with a growing pro- portion of turnover derived from buoyant export markets, and orders on hand are showing a satisfactory increase.

Those for furniture, which were depressed during the summer, have recently shown a modest improvement, the directors add.

	1975-76 £	1974-75 £
Turnover	8,439,869	7,304,247
Profit before tax	539,082	682,930
Taxation	250,241	364,375
Net profit	288,841	318,555
Dividends	141,163	129,994
Forward	1,067,299	949,821

GLENFIELD

Crane, the parent company of Glenfield and Kennedy Holdings, wishes to buy up half the out- standing amount of Glenfield's 5½ per cent. unsecured loan stock 1977 82 (approx. £600,000 at nominal value) at a price of £71.30 for every £100 nominal of loan stock.

Terry Kirk

Mr. William Fraser, chairman of BICC.

Midway advance for Wm. Morrison

FIRST HALF to July 31, 1976, turnover of Wm. Morrison Super- markets increased from £22.42m. to £28.03m., and the directors confidently expect to achieve a turnover in excess of £64m. for the year, against £48.83m. for the year to January 3, 1976.

Pre-tax profit for the half year advanced from £719,731 to £882,989 —last year's figure was £1,647,471.

The improved first half figures reflect close control of expendi- ture, better utilisation of labour and increased profit margins.

Additional expenditure of £2.8m. was incurred making a total of £3.3m. currently tied up in assets under construction which have not yet made any contribution to profits, the direc- tors state.

Interest is now payable rather than receivable.

The Hunslet complex opened in August and the Rothwell store opened yesterday. Construction of stores at Horsforth and Mayo Avenue is on schedule and both will open within six weeks. All will have LifeStyle departments and the directors are confident they will be trading successfully by Christmas.

Building work has commenced for a store at Ripon. Agreement has been reached to lease a super- store in Harrogate with a sales area of 40,000 square feet.

A new central warehouse for wines and spirits has commenced operation which will allow the company to increase sales and release additional space in the Hilmore warehouse for grocery products.

	Half year 1976 £	Half year 1975 £
Turnover	28,027,268	22,415,792
Trading profit	871,764	615,742
Rents receivable	79,776	23,545
Interest payable	19,551	*60,441
Profit before tax	882,989	719,731
Taxation	459,000	375,000
Net profit	423,989	344,731

* Received

● comment

At the trading level Morrison's figures are right up to expecta- tions with a 41 per cent. profits rise on a sales gain of a quarter. But the swing to an interest charge rather than a credit—a turnround of £100,000—takes the edge off the pre-tax performance where the advance is just 23 per cent. The move into overdraft had been anticipated at the end of last year, and reflects Morrison's current phase of expansion and development of its non-food LifeStyle operation after a fairly quiet period when the group was digesting its last spate of store openings. For the full year the forecast of turnover up by 31 per cent. to £64m. indi- cates pre-tax profits just over £2m. So the shares at 82p are selling on a prospective p/e of 6.6, though the low yield of 3.8 per cent. is an obvious restraint on a higher rating.

BICC profit tops £20m. at mid-term

IN THE first half of 1976 sales of BICC expanded from £375.8m. to £426.8m. and pre-tax profits advanced from £17.26m. to £20.83m.

After tax up from £7.66m. to £11.03m. and minorities of £3.09m. (£2.71m.) earnings are shown at 4.85p (5.40p) per 50p share.

The chairman, Mr. W. Fraser, says that basic economic factors, particularly interest rates and the performance of sterling, are bound to play a part in deter- mining the level of industrial activity in the U.K. in the coming months.

Neither of these factors is favourable at the moment but he believes that the group's wide- spread overseas interests and the intensification of its direct export efforts should at least enable the maintenance of earnings in the second-half. Stated earnings for all of 1975 were 9.60p.

The interim dividend is held at 2.25p net on capital increased by the one-for-five rights issue in March. At that time a maintained total of 6.61p for the year was forecast.

	First half 1976 £000	First half 1975 £000
Sales	426,870	375,800
Share associates	3,415	2,578
Profit on redemption	37	401
Investment income	256	240
Depreciation	9,464	8,112
Directors' fees	14	150
Finance charges	4,772	3,690
Pre-tax profits	20,828	17,264
Tax	11,071	7,634
Minorities	3,094	2,707
Extraordinary debits	1,947	907
Attributable Ordinary	4,767	5,617

Sales include exports up by 20 per cent. to £71.9m. and sales by overseas subsidiaries up by 24.3 per cent. to £172m.

Compared with 1975 year-end exchange rates first-half sales have benefited by £15m., pre-tax profit by £1.89m., net profit by £1.1m., profit attributable before extraordinary items by £0.73m., and earnings per share by 0.53p.

Extraordinary debits comprise profits and losses arising on the translation into sterling, or on the repayment, of foreign cur- rency borrowings and currency exchange adjustments on intra- group indebtedness, and are stated after deduction of minority interests.

Balfour Beatty's sales and profits for the half-year were a consider- able improvement on 1975. Any contracting activity involves some degree of risk, but particu- lar attention is now being directed to avoiding large open-ended contracts, says Mr. Fraser.

BICC Cables' pre-tax profit was marginally better, but there has been no real improvement in the U.K. demand. Fortunately the company has a firm foothold in many export markets and the directors "are determined to improve this position still further."

BICC Industrial Products con- tinues to develop the business in non-cablemaking fields and although volume did not increase profits show an improvement on both the previous half-year's. This company has considerable flexibility of operation which enables it to benefit from specific opportunities, even if there is no general up-turn in U.K. industrial activity, members are told.

On the international side, first- half profits held up well consider- ing the relatively low level of activity in almost all parts of the world. Even during a general re- cession in world trade many of the countries in which the group operates have large unsatisfied domestic markets which should keep the overseas factories con- cerned busy in the second half of 1976.

During the half year operations at the electrolytic refinery were temporarily suspended to enable the capacity of the plant to be extended. Pre-tax profit includes £917,000 arising from the realisa- tion of part of the base stock attributable to this operation.

Mr. Fraser will retire as chair- man of the company and from the Boards of subsidiaries with effect from December 31 but will continue to be available on a consultative basis for three years. The new chairman will be Mr. C. H. Broughton-Pipkin.

See Lex

BOARD MEETINGS

The following companies have notified dates of Board meetings to the Stock Exchange. Such meetings are usually held for the purpose of considering divi- dends. Official indications are not avail- able whether dividends concerned are interims or finals and the sub-divisions shown below are based mainly on last year's timetable.

TO-DAY

Interims: Booker McConnell, Braxton Estat., Central Wagon, Finlay Packag- ing, Laporte Industries, Newey Group, Rio Tinto-Zinc, Tehidy Minerals, Tilbury Contracting, Ward White, William Whit- tingham.

Finals: G. R. Francis, Maynards, Throgmorton Secured Growth Trust, Walker (C.) Letters.

FUTURE DATES

Interims—	
Anglo American Corpn. of S. Africa	Sept 23
Brent Chemicals International	Sept 28
Combined English Stores	Sept 28
J. K. Holdings	Sept 27
Legal and General Assurance	Sept 29
Lyle Shipping	Oct. 1
Manders	Sept 27
Modern Engineers of Bristol	Sept 30
Pearson (S.)	Oct. 5
Ready Mixed Concrete	Sept 28
Refuge Assurance	Sept 30
Rowntree Mackintosh	Sept 23
Senior Engineering	Oct 5
Solicitors' Law Stationery Soc.	Sept 28
Weeks Associates	Oct 19
Whatman Reeve Angel	Sept 24
Finals—	
Burns-Anderson	Sept. 29
Cape's	Sept. 30
Continental Estates	Sept 27
Charles David	Nov 12
Cope Allman International	Sept. 30
Dowding and Mills	Sept 24
Kamunting Tin Dredging	Sept 30
Parker Knoll	Sept 27

Jas. Wilkes in sound position

In spite of difficult trading con- ditions, the financial position at James Wilkes is sound, reports chairman Mr. J. Wilkes in his interim statement.

While market conditions appear to have stabilised "there will be a period of time necessary to adjust and build back," he adds.

As announced last week pre- tax profit for the first half of 1976 dropped from £0.19m. to £0.13m.—all group activities de- clined but Mr. Wilkes says that most are coping well with de- pressed trading conditions but with reductions in margins.

The company makes business forms and equipment.

Under the terms of an option agreement a further 25 per cent. of the Ordinary shares in P.A. Data Processing Accessories was acquired on June 30, 1976, and the remaining 24 per cent. will be purchased on September 30, it is stated.

G. Scholes recovers to £1.33m.

TURNOVER OF electrical engin- eers and manufacturers of "Wylex" electrical products, George H. Scholes and Co., in- creased from £5.57m. to £6.23m. in the year to June 30, 1976, and pre-tax profit recovered from £1,122,853 to £1,327,380. At half- way profit was up from £507,000 to £520,000.

Earnings per 25p share in- creased from 12.9p to 14.8p for the year, and the dividend is stepped up from 13.5p to 14.85p net with a final of 10.85p.

Tax absorbs £700,258 (£569,579).

Changes at Heywood Williams

In his annual report, the chair- man of Heywood Williams Group, Mr. R. R. Scholes tells members that action taken to strengthen management have included his resumption of the managing directorship allowing Mr. Ralph Hinchliffe, as his deputy to con- centrate on the financial aspects of the business. "As a result the financial management and control throughout the group have been significantly improved," he says.

In addition to these manage- ment changes, which were not intended as a permanent solu- tion, the group has appointed a new chief executive and two new non-executive directors pre- pared to devote a significant part of their time to group business.

While problems still remain, notably in the architectural and the home improvements divisions, the prospects in other areas are brighter says Mr. Scholes, and he is hopeful that the group will return a much improved perform- ance in the current year and will be capable of further progress thereafter.

As known there was a pre-tax loss of £926,000 for the year to April 30 1976 compared with profits of £391,000 for 1974-75.

The group manufactures metal window and door frames.

At the AGM on October 12 at Huddersfield, a special resolution will be proposed to extensively redefine directors' powers.

Law Land turns in £0.46m. half-time

FOR THE half-year to June 30, 1976, pre-tax profits of Law Land Company have jumped from £252,296 to £463,954. After tax and minorities and taking in a transfer of £61,000 (£250,000) from capital reserve in respect of development properties, the attributable balance emerges lower at £278,896 (£357,865). Earnings per share, including a transfer from capital reserve, are given as 0.83p, down from 1.09p.

An interim dividend of 1p (same) net per 20p share is declared. In the year 1975, the company made pre-tax profits of £659,036, up from £526,799, and paid dividends totalling 2.317p.

	Half year 1976 £	1975 £
Turnover*	4,756,[illegible]	2,425,545
Gross rents	2,[illegible]	1,558,231
Trading profit	35,239	56,449
Pre-tax profit	463,954	252,296
Taxation	295,038	125,900
Minorities†	24,[illegible]	3,[illegible]
From capital reserve‡	61,000	250,000
Attributable	278,896	357,865

*Includes gross receipts from property sales £2,[illegible] (£419,230). †Relates to Australian subsidiaries. ‡Relates to development properties.

The directors state that sales of properties in Australia, including the North Ryde, Sydney, industrial site and the newly-developed, unlet, office block in North Sydney have enabled a short-term Australian borrowing of A$3m. to be repaid.

In Belgium, negotiations for the sale of the industrial site at Diegem, near Brussels, are at an advanced stage, the directors report, and in the U.K. a £1m. short-term bank loan has been repaid.

Lettings of new office and industrial accommodation have been achieved which will produce additional income of £200,000 per annum, say the directors. The main benefits will be reflected in the 1977 accounts. Other negotiations are in hand. Independent valuations of the group's properties are in course of preparation.

A change has been made in the basis of accounting for the conversion of foreign currencies, the directors state. The policy now is to convert both the foreign currency borrowings and overseas fixed assets financed by those borrowings at current rates. The effect of this change is that £1,272,000 previously made good from capital reserves in respect of deficiencies on conversion of foreign currency borrowings have now been written back to capital reserve.

Extraordinary items for the half-year shown amounted to a net credit of £438,000 which has also been transferred to capital reserve, the directors report.

Sheffield Twist down midway

PRE-TAX PROFITS of Sheffield Twist Drill and Steel for the half year ended June 30, 1976, fell from £1,108,000 to £511,000.

The group has changed the accounting basis of providing for the depreciation of fixed assets with effect from January 1, 1976, so as to take account of increased replacement costs resulting from inflation. The effect of this change, the directors state, has been to reduce the pre-tax profit by £120,000.

Turnover for the six months increased from £7,881,000 to £8,602,000.

Last year, the company made pre-tax profits of £1,868,000. SKF of Sweden owns over 98 per cent. of the equity.

The directors state that the trend of orders received to date indicates that a gradual recovery is taking place and that there will be a recovery in trading profits next year after a slow improvement during the second half of 1976.

MINING NEWS

A Canadian view of uranium

BY KENNETH MARSTON, MINING EDITOR

THE former president of the Canadian Government's Eldorado Nuclear, Mr. William Gilchrist, reckons that current demand for uranium is increasing by some 18 to 22 per cent. a year, "which is the greatest expansion in demand any base metal has ever experienced."

Pointing out that it can take from four to 10 years from an initial discovery to reach the production stage of a mine, he said that last year's Western world production of uranium oxide was about 25,000 tonnes while some 70,000 tonnes will be needed by 1980 and, perhaps 125,000 to 150,000 tonnes by 1985," which is really to-morrow by mining standards."

This, he added, will call for a major effort in exploration and development. Mr. Gilchrist, a director of Canada's Madawaska Mines was speaking at the official opening of the latter's mill-concentrator complex at Bancroft, Ontario.

The re-opened mine, which is 51 per cent.-owned by the U.S. Federal Resources Corporation and 49 per cent. by Consolidated Canadian Faraday, is to supply uranium to the Italian Government agency AGIP at world prices less 5 per cent.

Mining industry representatives attending pointed out that Canada's potential contribution to uranium supply was being hindered by slackening exploration, Government interference and lack of incentives. However, Mr. Gilchrist is also on the Board of the Northgate Exploration group's associated Westfield Minerals, companies which have substantial uranium exploration projects on hand.

JAPAN CAUTIOUS ON USSR COPPER

The Soviet Union has revived a proposal for Japan to develop the big Udokan copper deposits in Siberia, sources close to the Federation of Economic Organisation (Keidanren) said in Tokyo. The matter was apparently raised in talks last month.

The Japanese copper industry is said to be very cautious about the suggestion. Large supplies of Government funds could not be expected and the cost of revelopment would be much higher than the estimates of $1.6bn. (£922m.) calculated when the project was first mooted under joint co-operation plans ten years ago. At the same time the industry is already involved in copper mining plans in Peru and Africa.

TANGANYIKA CONCESSIONS

Failure to find a quorum has caused the general meeting of Tanganyika Concessions preference share holders to be adjourned from Monday to September 27. Consequently an extraordinary general meeting of the company, linked to the preference shareholders' meeting, has been postponed to the same day. Both metings will be held at the Bahamas International Trust Building in Nassau.

BHP presses on at Deepdale

DESIGN WORK at the Deepdale iron ore deposit in Western Australia is being pushed ahead, the chairman of Broken Hill Proprietary, Sir Ian McLennan, told the annual meeting in Melbourne yesterday. BHP owns the deposit and is seeking orders from Japanese steel mills.

"The starting point for this development will be related to the increased demand requirements of the world steel industry," Sir Ian added.

It is hoped to start production in 1978 at the rate of 5m. tonnes a year, rising to 15m. tonnes in three years. Of this latter figure, about 6m. tonnes would be available for Japan. Last April, Nippon Steel disclosed that BHP had asked for a reply by this month on proposals to sell iron ore.

Deepdale is one of three major new Western Australian iron ore projects seeking not only Japanese orders but also Japanese equity participation. The others are Marandoo, run by Texas Gulf and Hancock Wright, and Goldsworthy C, which is presently subject to a restructuring organised by Consolidated Gold Fields.

Meanwhile, BHP has just completed a major expansion project at the Mount Newman iron ore development, Sir Ian told shareholders. This lifts production capacity to 40m. tonnes from 35m. tonnes.

Turning to copper developments, Sir Ian said that BHP had reached agreement with two foreign companies on the formation of a consortium to make further studies of the Ok Tedi copper prospect in Papua New Guinea. The agreement has come in time to beat the deadline, at the end of this month, imposed by the PNG Government for the formation of a consortium.

The companies involved are Mount Fubilan Development, a subsidiary of Amoco Minerals, which is part of the Standard Oil (Indiana) group, and a German concern, Kuperferexploration Gesellschaft. The German company brings together, in a joint venture, Metallgesellschaft, Siemens, Degussa and Kabel-und Metallwerke Gutehoffnungshuette.

The study at Ok Tedi was originally planned to start next month. *Drilling to provide an* estimate of reserves in excess of the 150m. tonnes already established was completed last April. BHP were 770p yesterday.

BIDS AND DEALS

Newman-Agar Cross terms agreed

Negotiations for the long-awaited bid by Newman Industries for the Agar Cross electrical concern, in which it already has a considerable stake, have been completed and agreed bid terms were announced yesterday. The offers, extending to the two classes of Preferred stock, which it is desired to buy out to consolidate the equity, value the capital of Agar, which has incurred losses in several of the past few years, but which returned a net profit of £155,000 for 1975-76, at some £680,000. Dividends on the Preferred stock are more than 12 years in arrear.

Newman, for which Guinness Mahon is acting, is offering 43 of its own shares, quoted 1p up at 48p last night, for every 100 in Agar, valuing the latter at just over 19½p, compared with a closing price of 19p, 3p higher.

For every £100 of 4.9 per cent. Cumulative Preferred stock in Agar, Newman offers 55 new £1 10 per cent. Cumulative Preference shares and 80 Ordinary shares, valuing this stock at some 81p per £1 nominal; the price closed 14p up at 88p

The offer for the 5.6 per cent. Second Cumulative Preferred stock is 60 Newman £1 10 per cent. Cumulative Preference shares and 30 Ordinary shares for every £100 of stock. This stock, valued by the terms at some 64p for £1, ended 1p down at 64p yesterday.

Newman has holdings which at present entitle it to 23.2 per cent. of the votes which can be cast at Agar annual meetings. They consist of £231,968 Ordinary shares, £49,200 of 4.9 per cent. Cumulative Preferred stock and £100,500 of 5.6 per cent. Second Cumulative Preferred stock.

The Boards of Agar Cross and of Charterhouse Japhet who are acting as independent advisers to the company, consider the terms fair and reasonable and recommend them. Mr. Alan Bartlett is chairman of both companies.

The offers are subject to various conditions, including acceptances being received from a majority representing not less than 75 per cent. by number of each class of holders of the Cumulative Preferred stock, the Second Cumulative Preferred stock and the Ordinary shares. This must also amount to not less than 90 per cent. of each class or such lesser percentage as Newman may decide, being 50 per cent. of the Ordinary shares and being stock carrying more than 50 per cent. of the voting rights in Agar.

Newman has recently purchased a major share block in the pottery concern Alfred Clough, raising its holding in that company to more than 90 per cent. Mr. Bartlett is also becoming chairman of Clough.

APV/HALL THERMOTANK

Details of the Convertible Loan Stock which will form part of the consideration in APV Holdings' agreed £11.4m. bid for Hall-Thermotank, were issued with the announcement of the offer last night. Terms, as reported on page 1, are one APV Ordinary share and £2.73 nominal of a new 10.75 per cent. Convertible Unsecured Loan Stock 1997-2002 for every six H-T shares.

The Convertible Unsecured Loan Stock will be convertible into APV Ordinary shares in each of the years 1982 to 1997 on the basis of one Ordinary share for £2.80 nominal of stock.

Accepting H-T holders will be permitted to retain a special interim dividend of 0.86252p per share net in respect of the year ended September 30, 1976, payable on January 31, 1977.

Discussions are in progress about H-T's 4.9 per cent. £1 cumulative Preference shares which may lead to either an exchange for APV Preference shares or a cash offer.

S. G. Warburg is acting for APV, while H-T is advised by Noble Grossart.

ODEON (IRELAND)

The recommended offers on behalf of Odeon Ireland for the Ordinary and Preference shares of Irish Cinemas will remain open for further acceptances, until further notice.

Acceptances of the offer for the Ordinary have been received in respect of 180,610 shares which amount to 78.72 per cent. of the Ordinary shares of Irish Cinemas, the subject of the offer. Prior to the offer, Odeon Ireland already owned 1,237,238 Ordinary shares in Irish Cinemas—about 84 per cent. of the total Ordinary capital.

Acceptances of the offer for the Preference shares of Irish Cinemas have been received in respect of 142,067 which amount to 71.04 per cent. of the total Preference capital.

SHARE STAKES

Unochrome International—Jorehaut Holdings has purchased a further 25,000 Ordinary shares bringing its aggregate holding up to 3.31m. shares.

JCEC—Manchester Nominees (AB Account) has purchased a further 65,000 Ordinary shares, bringing its total holding to 410,500 shares (24.4 per cent.).

LEP Group—Trustees of a settlement by Mr. R. K. Leeper have reduced their holding and now hold 741,534 Ordinary shares.

Artagen Properties—Sun Life Assurance Society now has an interest in 53.92m. shares.

Initial Services—London, Manchester Assurance Company and its subsidiaries have reduced their holdings of the 8½ per cent. cumulative Preference shares to 90,000 shares (22.5 per cent.).

Kingside Investment Trust—River Plate and General Investment Trust has purchased a further 900,000 Ordinary shares and together with its subsidiaries now hold 1,370,000 shares (15.198 per cent.).

EQUITY ENTERPRISES

Mr. J. Daly and Mr. D. J. Dawson announce that in connection with their cash offer of 3p per share for Equity Enterprises, which became unconditional on September 16, 1976, acceptances had been received in respect of a total of 1,110,145 shares at 3 p.m. on September 20, 1976. Mr. Daly and Mr. Dawson together with their associates owned 3,269,711 Ordinary shares in Equity on August 6 (the date of the announcement of the offer) and have not otherwise acquired or agreed to acquire any further shares since that date.

Mr. Daly and Mr. Dawson and their associates now own 4,379,856 Ordinary shares in Equity, representing 58.9 per cent. of the issued capital.

At meetings yesterday the accounts for the 12 months ended December 31, 1974 and for the nine months' period ended September 30, 1975 were approved, and the proposals for the reorganisation of Equity and the change of name were carried.

ASSOCIATES DEAL

Rowe Rudd and Co. announce that on behalf of clients it has bought 1,231,278 Herbert Morris Ordinary shares at 120p.

Results in brief

PHOTOPIA INTERNATIONAL (importers and distributors to photographic, audio and electronic trades)—Results year to April 30, 1976, already known. Fixed assets £330,130 (£295,500), net current assets £1,545,298 (£1,213,912). Chairman, "reasonably confident" that this year will be a better one. Meeting, Stoke-on-Trent, October 14, 2.30 p.m.

SINGLO HOLDINGS—Results, year to March 31, 1976, already known. Fixed assets £102,1[illegible] (£68,[illegible]), Current assets £1,702,985 (£946,006)—bank and cash balances £161,498 (£11,444). Current liabilities £871,915 (£176,616). Net assets £1,[illegible],510 (£561,720). Substantial part of proceeds of November's rights issue were invested in Bandanga Holdings, which is currently trading at a very satisfactory level. Fieldman Preserves, acquired in January currently trading profitably. Further acquisitions expected. Rupee subsidiary to be established in India, in 1977-78. Permission being sought from Indian Government to remit profits from 1974-75 and earlier years to this country. This would permit payment of Ordinary and Preference dividends for 1974-75. Meeting, Isleworth, Middlesex, October 14, 11 a.m.

Record £2.71m. by John Haggas

ON TURNOVER up from £13.65m. to £16.11m., pre-tax profits of worsted spinners, John Haggas advanced from £2.14m. to a record £2.71m. for the year to June 30, 1976, after a rise from £0.91m. to £1.3m. in the first half.

Earnings are shown at 38.81p (41.89p) per 10p share and the dividend is lifted from 2.77p to the maximum permitted 3.02p net with a final of 2.02p.

The directors say the level of activity is gradually improving in all areas of the business, and they are more than usually confident that the current year's profit will again be higher.

Profits were struck after depreciation of £360,000 (£335,000) but before tax of £1,411,000 (£1,135,000) and profits on the sale of Government securities of £601,000 (loss £316,000).

● comment

John Haggas's investment income nearly doubled to some £740,000 so making a major contribution to the 26 per cent. pre-tax profits increase for the year following a 36 per cent. boost in the final quarter. The chairman has argued his case publicly for limiting new investment within the group in favour of accumulating investment in gilts (currently amounting to more than £5½m. against a previous £2.7m.) and the market has clearly been impressed by the results. The shares rose 25p yesterday to 305p reducing the yield to just 1½ per cent. covered nearly 18 times. Without non-trading income, pre-tax profits were still 13 per cent. higher helped by a measure of recovery in the fur and knitting divisions. The spinning side meanwhile continues to work at full capacity on the back of an almost doubled export market now contributing around 15 per cent. of total sales. The p.e of 5.6 compares with a textile sector average of 10.5.

Bandanga profit growth

Group pre-tax profit of Bandanga Holdings increased from £61,044 to £90,200 in the half year to March 31, 1976.

The figures incorporate three months results of the Purbeck Group, acquired at end 1975. Purbeck trading is ahead of budget after a good summer and the tea company crop has been at a record level, thus the second half is expected to produce a higher level of profit, the directors state. Profit for the year to September 30, 1975 was £104,674.

The interim dividend is raised from 1.573p to 1.7303p net per 25p share, and the maximum permitted total (3.167p for 1974-75) is intended.

	Six months 1976 £	1975 £
Profit before tax	90,200	61,044
Taxation	[illegible]	[illegible]
Net profit	[illegible]	[illegible]
Preference dividend	[illegible]	—
Ordinary interim	[illegible]	[illegible]

New life plans for top executives

Two life companies yesterday announced the launching of schemes designed to meet the life assurance requirements of directors and top executives. The plan from Clerical, Medical and General—Lifetime Directors' Plan—aims to provide directors of private companies, would do not need pension provision, with a tax efficient means of protecting their dependants against Capital Transfer Tax. This is done by means of whole life with profits policies, so that some hedge against inflation can be provided. Alternatively, low cost cover can be arranged by means of a convertible term assurance.

Scottish Equitable has also brought out a plan designed to meet the Capital Transfer Tax problems of lifetime directors and it is again based on a whole life with profits policy. But the scheme provides for the benefits to be taken in part lump sum part pension to dependents thus providing valuable protection. The plan is arranged so that the benefits are approved as a pension arrangement, so that the benefits are paid at the discretion of the trustees, thus avoiding CTT. The premiums are paid into a tax free pensio nfund thus providing a better return for investors.

هكذا من الأصل

Bank of Scotland up £3.84m. at halfway

GROUP PROFIT, before tax, of Bank of Scotland increased from £7.42m. to £11.26m. in the half year to August 31, 1976.

It is difficult to forecast the year's results, but it is hoped that a satisfactory rate of progress will be maintained, the directors state. Profit for the year to February 29, 1976 was £17.47m.

The interim dividend is lifted from 4.43p to 4.78p net per £1 unit. Last year's total was 8.868p.

It has not been deemed necessary to make any additional special provision at this time for bad and doubtful debts. Although the new staff pension fund is now in operation, some months will elapse before a detailed valuation is received and the Board have considered it prudent to set aside an additional provision of £1m.

The improvement in pre-tax profit in relation to the six months ended February 29, 1976 is mostly accounted for by the elimination of the special charge for bad and doubtful debts. As compared with the six months ended August 31, 1975, however, although expenses were substantially greater there were several favourable factors, including a higher level of resources, a more advantageous interest rate pattern and increased earnings by subsidiaries.

Profit after tax at £5.4m. shows an increase of 17.7 per cent. over the preceding period and 51.7 per cent. over the corresponding six months. After extraordinary items, the profit of £5.4m. is lower than the previous half-year when extraordinary credits arising from the sale of property were high.

Since the end of the period changes in the Bank of England's minimum lending rate and a call for additional special deposits of 1 per cent. have added to the uncertainties which lie ahead, the directors state.

	Six months Aug.'76 £000	Aug.'75 £000	Feb.'76 £000
Operating profit ...	12,041	9,358	11,878
Additional provn.*	—	1,000	1,000
Additional pension	1,000	1,000	1,000
Share associates...	214	58	173
Pre-tax profit	11,255	7,416	10,051
Taxation	5,853	3,636	5,461
Net profit	5,402	[illegible]	4,590
Extraord. credits	45	45	1,220
Ordinary dividend	1,571	1,429	1,431
Retained	3,876	2,176	4,388

* Bad and doubtful debts.

See Lex

RENWICK

Mr. Clifford Wilton, chairman of the Renwick Group told the AGM that the group was trading profitably everywhere except for the international forwarding side where "we hope to end losses by the end of the month." The land bank was being sold off as rapidly as possible.

Hillards growth continues

SALES FOR the first 20 weeks of the current year were 25 per cent. ahead of the corresponding period last year, reported Mr. Gordon Hunter, chairman of Hillards, the Cleckheaton, Yorkshire-based supermarket group, which operated 44 stores in the North and Midlands.

He told shareholders at the AGM that work had started on two new stores at Alfreton and Grimsby which he hoped would be ready for trading by Christmas 1977 and that the company had both financial and organisational resources available for further expansion.

Results so far in the current year indicated that the slight anticipated improvement in net trading margins was continuing and that pre-tax profits for the current year should show a material increase over last year.

Optimism at Reed & Mallik

Despite the general economic climate, Mr. J. M. Kretschmer, chairman of civil engineering contractors, Reed and Mallik, looks forward to the company's future with optimism.

The most important objective now must be growth towards much fuller utilisation of resources—not only to keep pace with inflation in terms of turnover, but also to make the best possible use of the company's present strength. At end April, 1976 there was a net cash inflow of £746,513 (£112,126).

He stresses that the current severe reduction in expenditure on new capital works is not conducive to this aim as far as the U.K. construction market is concerned. A reasonable share of the inquiries still available is, however, being received, and so far this year the company has been awarded some £8m. of new work, which puts the current order book at approximately £8m.

Steps are in hand to broaden the field of activities outside public works civil engineering projects.

Very shortly a formal agreement will be concluded with Sheet Piling Contractors, owners of the Hush and Semi-Hush noise controlled systems of pile driving, whereby R and M will have a 49 per cent. share in Hush Piling Western. That company will have the sole rights to use those proprietary systems in the western half of England and all of Wales.

The search for and appraisal of potential new outlets overseas continues. The markets for construction work in the Middle East and in Nigeria have had particular attention. The former is however, severely inhibited by the risks and difficulties of vast unilateral performance bonds: in Nigeria legislation requiring a high initial investment in a local company, with a preordained measure of indigenous control, is a stumbling block.

The directors are of the opinion that these and other factors make it essential to consider most carefully any long term venture abroad, however tempting it may be to move faster.

In the meantime they expect to tender for two major one-off projects, well suited to the company's expertise, in Mauritius and in Guyana.

As known, group pre-tax profit for the past year was £184,444 (£36,959). The rate of profitability of the first six months was maintained during the remainder of the year. Contracts currently in hand continue to show good progress.

In contrast to earlier years very few problems relating to the settlement of completed contracts remain outstanding, and there are no further fixed price commitments.

Meeting, Salisbury, October 14, at noon.

MILFORD DOCKS

Speaking from Italy, Mr. Charles Smith, chairman of Milford Docks, let it be known yesterday that he has "more than enough share votes from more than enough people" to enable him to require the Board to call an EGM of shareholders and this he will be doing shortly. Among other things these requisitions for an EGM require the resignation from the Board of three of the present directors.

B. Matthews expects to top £2m.

WITH THE "substantial improvement" forecast by chairman, Mr B. T. Matthews, now materialising, pre-tax profit of Bernard Matthews the Norfolk-based turkey producers, climbed from £42,000 to a record £500,000 in the 28 weeks to July 11, 1976, and the directors forecast that the 12 month total will be lifted from £1,052,000 to in excess of £2m. Turnover is expected to increase by over 30 per cent.

Net interim dividend goes up from 1.5p to 3.5p per 25p share (to reduce disparity) with the cost increasing from £60,000 to £140,000. Last year's dividend total was 7.5075p from pre-tax profits of £1,052,000.

	First 28 weeks 1976 £000s	1975* £000s	Year 1975* £000s
Sales	4,434	3,514	9,597
Profit before tax ...	500	42	1,052
Tax	260	22	580
Profit after tax ...	240	20	472

* Excluding Armour le Grys, acquired January 1976.

The chairman reports that both Bernard Matthews and its subsidiary Armour Le Grys, are trading very satisfactorily.

Demand for the group's products is running at record levels—exports are expected to exceed £1m. this year.

Although feed prices have increased significantly over the past six months, the group's forward buying policy has secured feed for this year's production at relatively favourable prices, the chairman says.

● comment

Margins are the key factor in the continued recovery at Bernard Matthews in the first half. The inclusion of Armour Le Grys would have accounted for no more than 20 per cent. of the increase while volume is evidently little changed. Forward buying of feedstuffs has resulted in some savings but more important has been the escalation in red meat prices, which has not only made turkey prices more competitive but has also allowed prices to return to a more realistic level. The favourable price trend is continuing into the more important second half, taking in the Christmas period, and with a large proportion of production already pre-sold £2m. looks a minimum total. Future movements of grain prices and red meats given the reduction of herds following the drought, are bound to influence investment sentiment but a 14.3 yield at 92p covered three times by the forecast is a reasonable buffer.

RECENT ISSUES

EQUITIES

Issue Price p	Amount Paid up	Latest Renunc. Date	1976 High	1976 Low	Stock	Closing Price p	+ or −	Div. Amount	Times covered	Gross Yield	P/E Ratio
[illegible]	F.P.	—	[illegible]	850	AmericaMedInt.Inc'$1	895	−5	Q24c	—	1.5	—
[illegible]	F.P.	—	£27¼	£24½	Berry Pacific Fd. US$1	£26½	..	40c		0.8	—
[illegible]	F.P.	17.9	70	64	Borthwick (Thos.) 50p	65	−1	5.5	2.0	13.0	5.8
	F.P.	—	£28	£26¾	Dentsply Int. Inc. $1	£26½	+¼	—	—	—	—
	F.P.	—	£31½	£25¾	Esmark $US1	£27¼	−¼	Q$1.52	—	3.1	—
[illegible]	F.P.	15.9	200	170	Hambro Life Assur.	174	+4	15.75	—	12.1	
[illegible]	F.P.	23.9	111	97	Mallins	102	−4	6.5	2.4	10.0	15.6
$47.86	F.P.	—	$2.60	$2	Reuown Inc.	$2.47	..	Q16c	—	0.7	
[illegible]	F.P.		132	96	Toms S.A. II	130	..	—	—	—	

FIXED INTEREST STOCKS

Issue Price £	Amount Paid up	Latest Renunc. Date	1976 High	1976 Low	Stock	Closing Price £	+ or −
£100	F.P.	—	101	100	Agricultural Mortgage 14⅜% Bond 1977	101	..
[illegible]	F.P.	—	106	101½	Dentsply 9% £1.9 Conv. Uns. Loan 1991-96	103½	+1½
£98.5	£10	—	£9	£9½	Eastbourne Waterworks 9% Red. Pref. '83	£9¾	−¼
£10		—	10	[illegible]	G.T. Asia (Sterling) Fd. Pfd. Red. Prf. 1p	10	..
US$100	F.P.	—	LF98¼	LF97	Ind. Fund of Finland 9% Guar. Notes '84	LF98¼	..
£99½	£10	17/12	9¾	7½	Islington 13¼% Red. Stock 1982	7½	−¼
US$100		—	$101	$100¼	New Brunswick (Province of) 8%	$101¼	..
US$99¼	F.P.	—	$92½	$90	Norsk Hydro 9% Bds. 1991	98½	..
£100	F.P.	1/10	100	94½	Portsmouth Water 9% Red. Prf. Stk. 1981	94½	−½
US$100	Nil	12/11	99¾	95½	Royal Int. Mort. 9% Red. 1987	99	..
US$10	F.P.	—	$100½	$99½	Saskatchewan (Prov. of) 8¾% Bds. 1986	$100	..

"RIGHTS" OFFERS

Issue Price p	Amount Paid up	Latest Renunc. Dates		1976 High	1976 Low	Stock	Closing Price p	+ or −
15	F.P.	8/9	6/10	15¼	13	Astra Sers.	14	....
$A3.50	Nil	5/11	—	180	175	Bank N.S. Wales	175pm	..
10	Nil	27/9	12/11	1	½	Bonas Webb	1pm	..
$A4	Nil	—	—	400	345	Broken Hill Props.	365pm	−5
27	Nil	24/9	5/11	3	1½	Buckleys Brew.	3pm	+1½
20	F.P.	10/9	8/10	20½	18½	Charterhall Finance	18½	...
$A1.75	Nil	—	—	130	77	Comm. Bk. Aust.	78	+1
185	F.P.	19/8	24/9	220	182	National Westminster	220	+10
50	Nil	28/9	15/10	15½	15	Nolton Estates	15pm	..
25	Nil	—	—	3½	2	P.M.A.	3pm	−1
200	F.P.	19/8	1/10	251	214	Reed Intl.	229	−6
24	Nil	2/8	8/10	[illegible]	25	Second City Props.	24½	+½
20	Nil	—	—	6½	5	Shakespeare...	5pm	−1
$A1.20	F.P.	16/8		131	85	Western Mining	115	+1
5	Nil	24/9	15/10	2½	2	Whatlings	2½pm	+¼
76	F.P.	17/8	1/10	91	86	Wintercroft Ind.	90	...
70	F.P.			82	82	Woodside-Burmah	82	+1

Renunciation date usually last day for dealing free of stamp duty. a Placing price to public. b Figures based on prospectus estimate. d Dividend rate paid or payable on part capital, cover based on dividend on full capital. p Pence unless otherwise indicated. n Forecast dividend; cover based on previous year's earnings. s Figures based on prospectus or other official estimate for 1976. Q Gross. † Figures assumed. ‡ Cover allows for conversion of shares not now ranking for dividends or ranking only for restricted dividends. ** Issued by tender. ◆ Offered to holders of Ordinary shares as a "rights." ♥ 200 S Afr. cents. § Rights by way of capitalisation. †† Tender allotment price. ◆ Reintroduced. ‡‡ Issued in connection with reorganisation, merger or take-over. ◆ Introduction. ◆ Issued to former Preference holders. ■ Allotment letters (or fully-paid). • Provisional or partly-paid allotment letters. ★ With warrants. ◆ After suspension.

Brown Muff first-half loss

Bradford department store Brown Muff incurred a pre-tax loss for the half year to July 31, 1976, of £58,172 against a profit last time of £656. Turnover excluding VAT was down from £2,149,227 to £2,018,961.

The sum of £30,250 (nil) has been transferred from deferred tax account, and the tax charge is nil (£341).

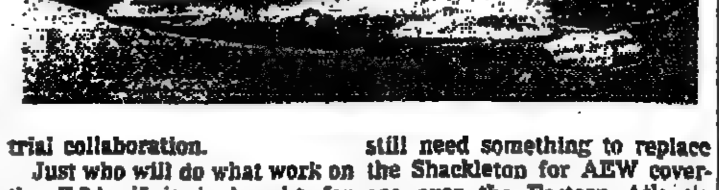
The chairman, Mr. M. H. Maufe, states that intense competition continues between retailers. However, he says, as always the sales in the second half of the year have the most important effect on the company's profitability. He believes that the measures the Board are taking will improve results by the end of the year.

Last year's pre-tax profit was down from £151,755 to £44,229, and a dividend of 2.5p net per 25p share was paid.

3710-1574

Flying radar for Europe

By MICHAEL DONNE, Aerospace Correspondent



BOEING OF the U.S. is expected to submit to Nato to-day its latest proposals to supply Western Europe with a permanent radar umbrella, covering the whole of the area from the North Cape of Norway to the Eastern Mediterranean, including the U.K. Air Defence Region and the Eastern Atlantic.

It would be the Airborne Warning and Control System (AWACS), designed especially to meet the requirements of the growing strategic defence concept of Airborne Early Warning (AEW). The system would be provided by a fleet of up to 32 Boeing 707 four-engined jets, specially modified to carry out radar surveillance, detection and tracking of hostile aircraft and missile targets, at great heights and for long periods. Coupled with a weapons-control and data transmission system aboard each aircraft, AWACS would also be able to direct defending air and ground forces towards the attacking aircraft and missiles.

The aim of the AEW concept is to supplement, and not replace, the existing expensive and complex ground-based warning systems, such as the Nato Air Defence Ground Environment (Nadge) — a recently completed chain of high-performance radar stations guarding the frontiers of Nato—and the older Ballistic Missile Early Warning System (BMEWS).

Ground-based systems are best for the detection and tracking of high-flying targets, but tend to leave uncovered the many significant "penetration routes" that can be used by low-flying aircraft. This is especially the case in Western Europe, with its varied terrain of mountains, deep valleys, rolling hills, jagged coastlines, and extensive plains. To close this gap the concept of Airborne Early Warning (AEW) has been evolving over recent years.

The idea is that a number of high-flying aircraft—enough for effective permanent coverage of the whole area—fitted with special radars and other devices, could look down on to low-flying targets, detecting them from great distances. The higher the AEW aircraft can fly, the greater the range of their radars. The information can then be fed into existing ground-based warning systems. By also serving as weapons-control system in their own right, the AEW aircraft could direct defending aircraft and missiles onto the targets more quickly perhaps than the ground-based systems.

Electronics

AWACS is a specialist system designed by Boeing and the U.S. Air Force. Basically, it is built round a modified Boeing 707, called E-3A, into which is fitted, instead of passenger seats, a complex system of electronics capable of handling detection, tracking, data transmission, and weapons-control functions, together with necessary catering and other facilities for the crew during the many hours the aircraft is in flight. The aircraft itself is distinguished by its massive 30-foot diameter radome, housing the Westinghouse downward-looking radar, mounted like a flat mushroom-head on stilts above the fuselage to give 360-degrees coverage.

The USAF has ordered 27 E-3As for its own AWACS fleet, deliveries to start next year. This will be enough aircraft to permit a permanent and complete airborne coverage of the U.S. coastlines, allowing for aircraft on the ground for maintenance, stand-by, crew resting, and emergencies.

In Europe, Nato has several options. It can buy the U.S. E-3A AWACS system — which is what the U.S. wants it to do. A fleet of up to 32 aircraft, providing a permanent umbrella over the whole of the Nato European area, would cost about \$2.2bn. of which about \$1.4bn. would be the cost of the aircraft (at about \$45m. each), and the rest for necessary infrastructure, including ground support, training and initial introductory costs, such as tooling.

Other options include either building an entirely new AEW aircraft — probably ruled out on grounds of cost, which would be prohibitive for the comparatively small number of aircraft involved — or converting an existing aircraft for the task, which would also be costly. The Hawker Siddeley Nimrod has been mentioned as a possible candidate for the AEW role, and there is no doubt that the RAF would like to have a replacement for its ageing Shackleton aircraft which have filled this role around Britain's shores for several years.

Nimrod

However, the Nimrod, developed from the Comet jet airliner, is an anti-submarine warfare aircraft, and although it has the long-endurance qualities for an AEW aircraft, it would still need extensive modification, primarily involving a new electronics package and a new downward-looking radar. This is well within the technological capabilities of the British and West European aerospace and electronics industries, but it would be expensive.

Boeing is arguing that by buying the E-3A Europe will be getting a mature system, involving lower risk and cost. Its latest proposals, moreover, will include a high measure of industrial collaboration.

Just who will do what work on the E-3A, if it is bought for Europe, remains to be seen. But clearly British and West German aerospace and electronics industries could expect a considerable share since they are likely to be among the biggest contributors to the cost of buying the system.

At the Farnborough International Air Show recently, Boeing made clear that its proposals remain flexible. For example, while France is not a military partner in Nato, the possibility of using the Franco-U.S. Snecma-General Electric CFM-56 "new-technology" engines remains an option to be considered, although it is also stressed that the E-3A does not need new engines to perform a European mission.

For Britain, the position is delicate. It already has Nimrod, but as a major Nato partner, Britain has to go along with a Nato Ministerial decision, and if this is in favour of AWACS there seems little doubt that Britain will make a powerful bid for as much of the work as it can.

If Nato rejects AWACS and also sets itself against any other AEW aircraft, Britain would still need something to replace the Shackleton for AEW coverage over the Eastern Atlantic and the U.K. Air Defence Region itself, where there are frequent incursions by Soviet long-range reconnaissance aircraft. This implies that the U.K. would then have to consider whether or not to modify Nimrod for the AEW role, bearing the cost alone.

There have also been suggestions that some countries in Western Europe may seek other trade-offs for any financial commitment to AWACS. West Germany, for example, has been reported to be thinking of seeking a U.S. deal on the Leopard main battle tank as part of its price for participating in AWACS, but the U.S. is certainly treating the two as separate issues.

Until the final Boeing proposals have been submitted, and considered by Nato, there are no clear answers to the many questions surrounding the whole future of the AEW concept in Europe. All that seems to be clear at this time is that the AEW problem in general and AWACS in particular as a solution to it, could become even more controversial in the months ahead.

Entertainment Guide

OPERA AND BALLET

COLISEUM. 01-836 3161. ENGLISH NATIONAL OPERA Tonight & Sat. 8 Salome: Tomor. & Tue. 7.30 The Coronation of Poppea: Fri. 7.30 Tosca.

COVENT GARDEN DER RING DES NIBELUNGEN Sat. and Oct 5 at 5.30 Die Walkure. Sept. 29, Oct. 7 at 5.30: Siegfried. Oct. 1, 9 at 5.30: Gotterdammerung. Oct. 4 at 7.30: Das Rheingold. 65 Amphi seats for all perfs on sale from 10am on day of perf. Personal bookings Oct. Opera and Ballet 240 1066 (Gardencharge credit cards. 836 6903).

SADLER'S WELLS TH. Rosebery Ave. EC1 837 1672. Until Sat. Evgs 7.30. ENGLISH MUSIC THEATRE CO. Tom's Cinderella Tomor. Tom Jones. Fri. Sandrina's Secret (La Finta Giardiniera) Sat. Paul Bunyan: from Tue., 25 Oct. The Royal Ballet.

THEATRES

ADELPHI THEATRE. 01-836 7611 Evgs 7.30. Sats. 5.30 & 8.30. Thurs. 3.0. IRENE "LONDON'S BEST NIGHT OUT. SPECTACLE CAPTIVATING TUNES AND RACY COMEDY." People. IRENE "SLICK SUMPTUOUS—THE MUSICAL IRENE HAS EVERYTHING." D. Express IRENE "WILL TAKE LONDON BY STORM." News of the World. NOW BOOKING TO MARCH 1977.

ALBERY. 836 3878. Evenings at 8.0. Mats. Thurs. 3. Sats 5 and 8.15 sharp. National Theatre Production COLIN BLAKELY in EQUUS by PETER SHAFFER Directed by John Dexter "STUNNING and COMPELLING." Std.

ALDWYCH. 836 6404. Inf 836 5332. Royal Shakespeare Company in Bernard Shaw's THE DEVIL'S DISCIPLE "This triumphant revival is played by a flawless cast." Daily Express. Today at 2.0 and 7.30 Th. Fri. 7.30. Sat 2.0 and 7.30. In repertoire with Chekhov's IVANOV. "This is a tantalising infuriating and super charged theatrical entertainment." F. Times. Next perf. Sept 28

AMBASSADORS. 836 1171. Evgs. 8.00. Mat. Tues. 2.30 Sat. 5.30. 8.30. HAPPY AS A SANDBAG 2nd Year of Delightful Hit Musical. "Wonderful Don't miss it." D. Exp. Dinner.Top price Seat £6 incl

APOLLO. 01-437 2663. Evenings 8.00 Mat Thur 3.00 Sat 5.30 and 8.30. Pauline COLLINS. John ALDERTON. "ARE BRILLIANT" D. Express, in CONFUSIONS "Super Alan Ayckbourn gives audience such a wonderful evening." Sun. Times

ARTS THEATRE. Mon. to Thurs at 8.30 Friday and Saturday 7.30 and 9.15. TOM STOPPARD'S DIRTY LINEN "Hilarious ... see it." Sunday Times

CAMBRIDGE. 01-836 6056 Continuing a season of prestige plays. Opening tonight at 7.0 (1st Night Tickets Available) Starring PETER WYNGARDE NYREE DAWN PORTER ELSPETH MARCH in ANASTASIA Limited Season only. Subs. Evgs 8.0 Mat Wed 3.0 Sat 5.0, 8.15.

CHICHESTER. 0243 86333. Tonight and Sept 23 28 at 7.00. Sept 25 at 2.00. MONSIEUR PERRICHON'S TRAVELS Sept 23 at 2.0. Sept. 24 at 7.0 THE CIRCLE.

COMEDY. 930 2578. Evenings 8.00 Sats 5.30 and 8.35 Matinees Thurs 3. THE THRILLER THAT REALLY THRILLS H. Hobson S. Times. "The excellent cast." Ev. News. GARY BOND ANTHONY BATE HILDEGARD NEIL ERNEST CLARK GETTING AWAY WITH MURDER By J. Lee Thompson

COMEDY. 930 2578. Evenings 8.0. Mat Thur. 3.0. Sat. 5.30 and 8.30. TRANSFERS HERE OCT. 4 OTHERWISE ENGAGED

CRITERION. 930 3216. Evgs. 8 Mats Thurs. 3 Sat 5.30 8.30. ALEC McCOWEN MICHAEL BRYANT JUDY PARFITT ANNETTE CROSBIE in THE FAMILY DANCE by Felicity Browne "Very funny brilliant ... an evening of delight." H. Hobson S. Times.

DRURY LANE. 01-836 8108. Evenings 8 sharp. Matinees Wed and Sat 3.00 A CHORUS LINE "A RARE DEVASTATING JOYOUS ASTONISHING STUNNER." Sun. Times.

DUCHESS. 836 8243. Evenings 8.00 Fri Sat 6.15 and 9.00 OH! CALCUTTA! NOW IN ITS 7th YEAR "Breathtakingly Beautiful." S. Tel "The Nudity is Stunning." D. Tel.

DUKE OF YORK'S. 01-836 5122 LAST 2 WEEKS. Evening 8.0 Matinee Wed. 2.30 Sat 5.15, 8.30 ALAN BATES in THE SEAGULL "The Seagull made the summer." Jack Tinker Daily Mail. "An intelligent and touching revival." Eric Shorter Daily Telegraph. Dinner Top Price Seat £6 incl A BEDFUL OF FOREIGNERS transfers here from Victoria Palace Oct. 4.

FORTUNE. 836 2238 Mon.-Fri. at 8. Sat. 5 and 8. Thur. 3 Avril ANGERS, Derek BOND in AGATHA CHRISTIE'S MURDER AT THE VICARAGE 2nd GREAT YEAR

GARRICK THEATRE. 01-836 4601 Evenings 8.0. Fri Sat. 6.0 and 8.40. RICHARD BECKINSALE is "side-splittingly funny." Daily Mail. in FUNNY PECULIAR "Mike Stott's exceptionally fine, vastly entertaining, brilliant comedy." S. Times "More good laughs than any other play in London." Observer.

GLOBE. 01-437 1592. Evenings 8.15. Mat. Wed. 3.00 Sat. 6.00 and 8.40. PETER BARKWORTH PETER JEFFREY AND PENELOPE KEITH, "the funniest woman in the West End." Guardian. DONKEY'S YEARS "MICHAEL FRAYN'S delightful comedy." Evening Standard. "Two hours of bubbling laughter." Daily Mirror.

GREENWICH. Crooms Hill. S.E.10. 858 7755 New Season opens with SCRIBES by Barrie Keeffe Oct. 6-30.

HER MAJESTY'S. 930 6606. Evgs. at 8. Friday's and Saturday's 5.45 and 8.30. IPI TOMBI "PULSATING MUSICAL." Evg. News. Seats £3 to 50p.

HAYMARKET. 930 9832. Evenings 8.0. Matinee Wed. 2.30. Sat. 5.00 and 8.15. Edward Woodward Geraldine McEwan. Stephanie Beacham. Geoffrey Palmer in Frederick Lonsdale's ON APPROVAL "You should rush to see it." D. Tel. "An evening of comic delight." Harold Hobson. Sunday Times. LAST TWO WEEKS.

HAYMARKET. 930 9832. Opens Wed. Oct. 13. 7.0. Prevs. from Tues. Oct. 5. Googie WITHERS. Susan HAMPSHIRE. John McCALLUM. Clive FRANCIS Martin JARVIS and Bill FRASER in The Chichester Festival Theatre's Production of Somerset Maugham's THE CIRCLE

KING'S ROAD THEATRE. 352 7488. Mon. to Thur 9.0. Fri. Sat. 7.30. 9.30. THE ROCKY HORROR SHOW THE BEST MUSICAL OF THE YEAR "Impossible to overpraise." Punch. NOW IN ITS 4th ROCKING YEAR.

LYRIC. 01-437 3686. Evenings 8.00. Mat. Wed., 3.0. Sat. 5.0 and 8.30. SHEILA HANCOCK. JOHN MOFFATT in THE BED BEFORE YESTERDAY A Comedy by BEN TRAVERS "STILL THE FUNNIEST COMEDY IN LONDON." Daily Mail.

LYTTELTON (new National Theatre). 928 2252 Ton't Mon. & Tue. 7.45. Tomor. 2.30 & 7.45 JUMPERS by Tom Stoppard: Fri. 7.45 Sat. 2.30 & 7.45 Weapons of Happiness. Over 100 excellent £1 seats on sale day of perf. from 8.30 a.m.

MAYFAIR. 629 3036 493 2031. Evgs. 8.15. Fri., Sat 6.0 and 8.45. ANNA RUSSELL The World's Funniest Concert Comedienne.

MERMAID. 248 7656. Food 2835. Prevs. tnt., tmr. 8.0. Opens Fri. 7.0. Subs evgs. 8.0. Mat. Sat. 5.0. FOR KING AND COUNTRY by John Wilson

NATIONAL THEATRE. See under LYTTELTON and YOUNG VIC.

OLD VIC. 01-928 7616. Previews from Oct. 6. First Night Oct. 11. LEONARD ROSSITER. JOHN STRIDE. DILYS LAYE. JOHN PHILLIPS in PETER BARNES' FRONTIERS OF FARCE

OLD VIC. 928 7616. 7.30. Sat. 2.30 "GLENDA JACKSON is superb." E.N THE WHITE DEVIL LAST 2 WEEKS

PALACE. 01-437 6834. Mon.-Thur. 8.0. Fri., Sat. 6.0. 8.40. JESUS CHRIST SUPERSTAR

PALLADIUM. 01-437 7373 Monday. September 27th. FOR ONE WEEK ONLY THE PASADENA ROOF ORCHESTRA MR. ACKER BILK AND HIS PARAMOUNT JAZZBAND THE ROY BUDD TRIO

PALLADIUM. 01-437 7373. Sunday, Sept. 26 at 5.00 DOROTHY MOORE. JIMMY JAMES and The Vagabonds WILD HONEY

PHOENIX THEATRE. 01-836 8611. Opening September 30 CARTE BLANCHE An uncensored entertainment with music Previews from tonight. Evgs. 8.15. Saturday 5.45 and 8.45.

PICCADILLY. 437 4506. Mon. to Fri. 8.0 Saturday 5.30 and 8.30. Jerome Kern's hit musical VERY GOOD EDDIE! "LOVELY to look at DELIGHTFUL to hear and HEAVEN to watch." D. Express "Absolutely enchanting. I really loved it." N.Y. Times. OVER 200 PERFS

PRINCE OF WALES. 930 8681. Opens Thur. 7.00. Sub. 8.00 Sat. 6.00. 8.45. MICHAEL CRAWFORD FRANCES CUKA in SAME TIME NEXT YEAR Red. price preview tonight 8.0.

QUEEN'S. 01-734 1166. Evenings 8.00. Mat. Thurs. 3.00. Sats 5.30 and 8.30. BEST PLAY OF THE YEAR Michael GAMBON in Simon GRAY'S OTHERWISE ENGAGED Directed by Harold PINTER. TRANSFERS TO COMEDY OCT 4

QUEENS. (01-734 1166.) Opening Oct 6 at 7.0 Subs 8.0. Sat 5.0 and 8.30. ALEC GUINNESS in YAHOO Box Office Open. Book Now!

THEATRES

RAYMOND REVUEBAR THEATRE. 734 1593 At 7, 9, 11 p.m (Open Suns.) PAUL RAYMOND presents THE FESTIVAL OF EROTICA '76 FULLY AIR CONDITIONED—You may drink and smoke in the Auditorium

REGENT. 323 2707. Evenings 8.30 Friday and Saturday 7.0. and 9.15. THIRD ECSTATIC YEAR NEW CAST! NEW EXCITEMENT! LET MY PEOPLE COME AN ADULT MUSICAL "Never a dull moment!" Evening News 100 tickets held for sale at door

ROUNDHOUSE. 01-267 2564 From tonight till Sept 26. Evgs. 8 LA GRANDE EUGENE SPECIAL RETURN SEASON 100 Performances Prior to World Tour

ROUNDHOUSE DOWNSTAIRS. 267 2564 Bristol University Evenings at 8.00 THE OZ OBSCENITY TRIAL Late shows Thurs-Sat 9.45: Seats 80p & IN CAMERA at 6 seats 80p.

ROYAL COURT. 730 1745. Opens Tue 7 Subs evgs 8 Sat 5 and 8.30 MOTHER'S DAY a comedy by DAVID STOREY See also THEATRE UPSTAIRS

ST. GEORGE'S 01-609 1198 49 Tufnell Park Road, Islington, N.7 (Tufnell Park Tube) Evenings 7.30 Matinee Saturday 2.30 All unsold seats after 7.20 p.m. £1.00 for OAPs and Students. Today, Tomorrow Fri and Sat. ALAN BADEL in RICHARD III Mon. Tues. Wed. mat and eves. PETER McENERY, SARAH BADEL in ROMEO AND JULIET

SAVOY. 836 8888. Evenings at 8.00 Sat 5 and 8 Matinees Wed 2.30. ROBERT MORLEY, GEORGE COLE in BEN TRAVERS BANANA RIDGE "HILARIOUS SUCCESS." D. Tel.

ST. MARTIN'S. 836 1443. Evenings 8.00 Mats. Tues. at 2.45 at 5.0 and 8.0 AGATHA CHRISTIE'S THE MOUSETRAP World's longest-ever run 24th Year

STRAND. 01-836 2660 Evenings 8.00 Mats Thurs. 3.00. Sat. 5.30 and 8.30 Doris Hare McDonald Hobley. Arthur Howard Barry McGinn NO SEX PLEASE— WE'RE BRITISH Directed by Allan Davis. SIX HYSTERICAL YEARS

TALK OF THE TOWN. 01-734 5051 FULLY AIR-CONDITIONED From 8.15, Dining and Dancing. At 9.30 Revue SWEET TEMPTATION and at 11 p.m. JULIE ROGERS.

TH. UPSTAIRS. 730 2554. Prevs Evgs 8.15 Opens Mon nxt 7. Subs 8.15

VAUDEVILLE. 01-836 9988 Evgs. 8.0 Mat. Tues. 2.45 Sats 5.0 and 8.15 GERALD HARPER HANNAH GORDON UNA STUBBS, PRUNELLA GEE in BAGGAGE "WITTY AND VERY FUNNY." E. News THEATRE AIR-CONDITIONED

VICTORIA PALACE. 01-834 1317 Evenings 8.00. Wed., Sat. 6.00 and 8.40 TERRY SCOTT JUNE WHITFIELD A BEDFUL OF FOREIGNERS "GENUINELY HILARIOUS." Gdn. Dinner and best stall £4 inc. (Mon-Th.) Transfers Duke of York's Oct 4

WHITEHALL. 930 6692-7765. Evgs. 8 Sats 6 and 8.45. Mats. Wed. 3. BRIAN RIX "MARVELLOUSLY COMIC." E. News Terence ALEXANDER Jane DOWNS FRINGE BENEFITS "You laugh until you are ill." Gdn. Supper and Top-price seat £5.30 inc.

WINDMILL THEATRE. 437 6312 Twice Nightly at 8.00 and 10.00 PAUL RAYMOND presents RIP OFF THE EROTIC EXPERIENCE OF THE MODERN ERA An entire French production. You may drink and smoke in the Auditorium "Takes to unprecedented limits what is permissible on our stage." Evening News

WYNDHAM'S. 836 3028 Evenings 8.0 Saturday 5.15 and 8.30 Millicent Martin, Julia McKenzie, David Kernan, Ned Sherrin in SIDE BY SIDE BY SONDHEIM "If you are planning to spend an evening in the musical theatre this year, I urgently suggest you go to Side by Side by Sondheim ... If you are planning to spend two GO TWICE." Pun.

YOUNG VIC. 928 6363 National Theatre Summer Season Ton't and Mon. 7 THEY ARE DYING OUT by Peter Handke (UK Prem) Tomor and Tue. 7.30 Troilus and Cressida. Seats £1.25. Some seats held for sale on day of performance

CINEMAS

ABC 1 & 2, SHAFTESBURY AVE. 836 8861 Sep. Perfs. ALL SEATS BKBLE. 1: ODE TO BILLY JOE (AA). Wk. & Sun. 1.50, 5.10, 7.10 2: SEVEN NIGHTS IN JAPAN (A). Wk. & Sun. 2.00, 5.15, 8.15.

CASINO. Old Compton St. 437 6877 DRUM (X). Cont. progs. 2.50, 4.50, 7.35. Sunday progs. 4.15 and 7.20

CURZON. Curzon St., W.1. 499 3737 THE MESSAGE (A). Arabic Dialogue film at 2.30 and 7.00. Last 8 days

EMPIRE, Leicester Sq. 437 1234 All seats may be booked at the box office or by post. FAMILY PLOT (A). Sep. perfs. Progs. 2.30, 5.30, 8.30

LEICESTER SQUARE TH. 930 5252 Neil Simon's Comedy MURDER BY DEATH (A). Sep. progs. Dly 2.30, 5.30, 8.30

ODEON HAYMARKET. (930 2738/2771) TAXI DRIVER (X). Sep. progs. Dly 1.30, 4.45, 8.15. Ft. times Mon.-Sun. inc. 2.05, 5.20, 8.30. All seats may be booked

ODEON LEICESTER SQUARE (930 6111) THE OMEN (X) Sep. progs Dly 12.45, 2.55, 5.40, 8.35. Late show Today 11.45. Seats bkble by post or at Box Office for Mon-Fri 8.35 prog and Sat & Sun all progs.

ODEON MARBLE ARCH (723 2011/2) BUGSY MALONE (U). There's Never Ever Been A Movie Like It. Sep. progs Wk 2.30, 5.30, 8.30. All seats may be booked

PLAZA 1 & 2, Lower Regent Street SW1 437 1234. Sep. perfs. All seats bookable Eve. perf. Box Office 11 a.m. to 7 p.m. (not Suns.). No phone bookings. 1. THE MESSAGE (A). Weekdays 2.30, 7.30 2. THE TENANT (X) Progs. wkdys. 1.30, 3.45, 6.10, 8.35

PRINCE CHARLES. Leic. Sq. 437 8181 2nd Year. The One and Only Original EMMANUELLE (X). Sep. perfs. daily (inc. Sun.) 2.45, 6.15, 9.00. Late show Fri. and Sat. 11.45. Seats bookable.

SCENE 1, 2, 3, 4, Leic. Sq. (Wardour St.) 439 4470.

SCENE 1. Cont. perfs. dly. 12.10. Late show Fri. and Sat. 11.55 Redford-Hoffman ALL THE PRESIDENT'S MEN (AA) Progs. 12.30, 2.55, 5.55, 8.55. Late show Fri. and Sat. 11.55.

SCENE 2. Cont. perfs. daily 12.55. Late show Fri. and Sat. 12.00. DRUM (X) Progs. 12.55, 3.05, 5.20, 7.30, 9.45 Late show Fri. and Sat. 12.

SCENE 3. Cont. perfs. daily 12.45. Late show Fri. and Sat. 11.00. CONFESSIONS OF A DRIVING INSTRUCTOR (X) 2.30, 5.50, 9.15. BABY BLUE MARINE (A) 12.45, 4.10, 7.35. Late show Fri. and Sat. 11.00.

SCENE 4. Cont. perfs. daily 12.55. Late show Fri. and Sat. 11.50 JAWS (A) Progs. 12.55, 3.35, 6.20, 9.05. Late show Fri. and Sat. 11.50.

WARNER WEST END. Leicester Square. Tel. 439 0791

1. REDFORD HOFFMAN ALL THE PRESIDENT'S MEN (AA) Sep. perfs. 2.05, 5.05, 8.05.

2. Sidney Poitier, Bill Cosby in LET'S DO IT AGAIN (U). Cont. perfs 1.20, 3.40, 6.00, 8.20.

3. STANLEY KUBRICK'S BARRY LYNDON (A). RYAN O'NEAL MARISA BERENSON Fully air conditioned. Sep. progs. 2.30, 7.30.

4. CLINT EASTWOOD THE OUTLAW JOSEY WALES (AA) Sep. perfs. 2.30, 5.10, 8.00.

ART GALLERIES

REDFERN GALLERY GRAHAM SUTHERLAND Paintings, Gouaches, Watercolours, Graphics and Sculpture from the Douglas Cooper Collection 14 September-7 October. 20 Cork Street, London, W.1.

COLNAGHI'S, 14, Old Bond St. W.1. 01-491 7408 ENGLISH WATERCOLOURS, DRAWINGS AND PAINTINGS Until 21 October Mon.-Fri. 9.30-6; Sats. 10-1.

PARKIN GALLERY, 11 Motcombe Street, S.W.1. 235 8144. Summer Exhibition including British Painters in the Mediterranean.

SLOAN STREET GALLERY. 158 Sloane St., S.W.1 Modern paintings, sculpture and graphics by interesting international artists. Wide range of prices. Tues.-Fri. 10-5.30, Sat 10-1

ROYAL ACADEMY OF ARTS 01 734 9052 L. S. LOWRY, R.A. 10-6 daily. Adm. 60p 30p on Mondays and until 1.45 p.m. on Sundays. Also THE MICHELANGELO MADONNA AND OTHER TREASURES IN THE PRIVATE ROOMS until 31st Oct., including a Memorial Exhibition to Raymond Erith, R.A. (1904-1973).

CLUBS

GARGOYLE. 60 Dean Street, London, W1 STRIPTEASE FLOORSHOW SEX UNLIMITED Show at Midnight also 1 a.m. Hostesses. Mon.-Fri. Closed Saturdays. 437 6455.

EVE. 189, Regent Street. 734 0557 A la carte or All-in Menu. Three Spectacular Floor Shows 10.45, 12.45, 1.45 and music of Johnny Hawkesworth & Friends.

THE HIERARCHY WILL BE IMMENSELY IMPRESSED with the Discreet Lavishness of Excellent Food & Erotic Cabaret Shows at JULIA'S OF ST. JAMES'S, 4 Duke of York St. London S.W.1. Tel. 01 734 1071 (Day) & 01 930 1648 (Eve)

هكذا من الأصل

The Babcock bid for Herbert Morris raises difficult questions of principle.

Tough nut for the fair trade office

BY GEOFFREY OWEN

W weeks after the con- sy over the Tate and Lyle or Manbré and Garton i. to most people's se, was not referred to the polies Commission), the of Fair Trading and the nment face another ially awkward merger on over the future control rbert Morris, the Lough- gh-based crane manufac-

: week Amalgamated rials, which had held 37.7 nt. of the Morris equity d been told by the Mono- Commission to reduce its gs to 10 per cent., nced that it had sold its stake to Babcock and at 120p per share. k, in turn, announced its on of bidding for the rest Herbert Morris shares at ime price, in accordance he rules of the City Code ke-overs and Mergers. The on for the Government is er this partial sharehold- d proposed merger should ferred to the Monopolies ission.

entry of Babcock is an ected twist in the Herbert saga. Founded in 1884. npany started in business he selling agency for a n-designed pulley block. ter became one of the British producers of over- travelling cranes and it now employs about people. During the 1960s fit performance was poor. new management team stalled in 1969 and recent mance has been encour-

Monopolies Commission's t on the company earlier ar was as follows: "While has already achieved a cant improvement in ucy and performance, it as some way to go before effectively equipped to the strong international tition which has deve- in recent years. The com- seems to be well organised ke the further effort that uired. This is recognised e Department of Industry regards the future of s as important to the U.K. crane industry and to the many basic industries that use its products."

Amalgamated Industrials was originally known as E. and H. P. Smith, an industrial holding company with which, for a period in the late 1960s and early 1970s, Pacific Holdings Corporation of the U.S. was associated. In 1970 Pacific approached the Morris family (which then held 40 per cent. of the Herbert Morris equity) to ask if they would sell all or part of their shares. The result was that Smith ended up with 30 per cent. of the Morris shares and the Morris family interest *was reduced to 25 per cent.*

Bryanston

In 1972 *Bryanston* Finance took control of Smith, bought out the Pacific holding, and re-named the company Amalgamated Industrials. Two Bryanston representatives, Mr. A. T. Smith and Mr. P. C. Hegard, went on to the Herbert Morris Board.

Since then a number of share transactions have taken place, ending in November 1975 with a full bid by AI for Herbert Morris, which was referred to the Monopolies Commission. In the meantime AI's parent, Bryanston Finance, had become the subject of a Department of Trade investigation under Section 164 of the Companies Act: that investigation is still in *progress.*

The main reason for the reference of the AI bid was the concern of the Office of Fair Trading that the bidding company had nothing significant to *offer Herbert Morris* and that, on the contrary, control by AI might tend to disrupt the efforts which the Morris management was making to improve the company's performance. That concern was confirmed by the Monopolies Commission itself which reported in May of this year.

The Commission was not impressed by AI's claim that it *would help to strengthen the* Morris management and would bring its financial expertise to bear on the company's financial problems. In the Commission's view, the improvement in Morris' recent results was mainly due to the management recruited by the present chair*man and managing director* (Mr. P. W. Robinson and Mr. E. P. McTighe) "much, if not all, of this improvement would have happened without any contribution from AI," the Commission said.

The Commission found AI's description of how it handled relations with its subsidiaries "difficult to relate to the past record of AI which appears to have bought and sold subsidiaries with regard mainly to the immediate financial interests of the group." The Commission found it impossible to ignore "the widespread distrust of Mr. A. T. Smith and Mr. P. C. *Hegard which stems from an* impression that in their business dealings they are interested primarily in making quick financial gains."

The Commission recom*mended* that the merger should not be permitted and that the shareholding of AI and its associates in Morris should be reduced to not more than 10 per cent. At the same time the Commission foresaw the possibility that if AI decided to dispose of its shares in one parcel, a fresh merger situation might be created, since the shares might be bought by another group seeking to con*trol Morris.*

"It may be," the Commission said, "that the shares could be placed with financial institutions, insurance companies, unit trusts and pension funds." Although this was not a firm recommendation—in any case the Government has no powers to force a company to dispose of an investment of this sort in a particular way—it was implicit *in the Commission's remarks* that the continued independence of Herbert Morris should, if possible, be safeguarded in whatever arrangements were made to dispose of the AI *shares.*

In the event AI has gone further than the Commission *asked in selling all of its shares,* but has ignored the suggestion that the shares might be placed with institutions. There is nothing the Government can do about that—presumably AI *reckoned that it could get a* better price from Babcock than by placing the shares elsewhere. But another merger situation has been created and the independence of Morris is threatened once again. The Office of Fair Trading now has to start discussions with the parties to see if this new merger should be referred to the Monopolies Commission.

Clearly Babcock is a very *different proposition from AI.* It is a large company with considerable engineering know-how in fields related to that of Herbert Morris. Its management is generally regarded as good, and it can point to a record of taking over engineering companies similar to Morris, respecting their independence, and encouraging the existing management to develop the business under the Babcock *umbrella. Although Babcock's* recently acquired U.S. subsidiary, American Chain and Cable, has products which are complementary to those of Morris, no question of rationali*sation or factory closures arises* in this case. Babcock argues *that the merger will enable the* Morris management to carry on as it has been doing, but in a safe and stable environment.

The question that the direc*tors of Morris have to ask them*selves is whether the contribu*tion from Babcock is sufficiently* great to offset what they may see as the disadvantages of being swallowed up by a large group and of losing their independence. If they continue to fight the bid, they will presumably have to argue that the long-term interests of the business, including shareholders, management and employees, will be better served by staying independent.

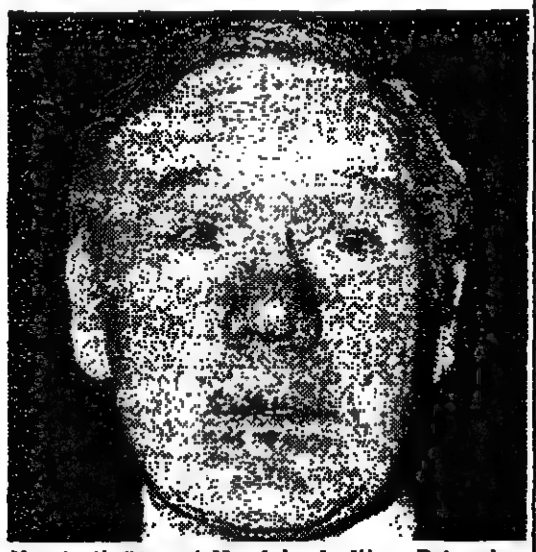
Employees

The Office of Fair Trading, in deciding whether or not to recommend to the Secretary of State that the merger should be referred, has to concentrate primarily on any possible detriment to the public interest if the merger goes through.

A great deal will depend on the attitude of the Herbert Morris management and perhaps that of the employees. If they are not convinced by the rationale of the Babcock bid, and if they decide to make a fight of it, it may carry some weight with the OFT.

If the Morris directors maintain their present opposition to the bid, a precedent which they may well wish to consider is that of Wolseley Hughes, whose battle against an unwelcome take-over offer from Tarmac in 1973 ended with a reference to the Commission and Tarmac's subsequent decision to drop the bid. It was a classic case of a defending company using every available form of political and industrial pressure to thwart the take-over. Whether the Morris directors will feel as strongly about the Babcock approach — and whether they make an effective case against it — remains to be seen.

There are grounds for arguing that the absorption of medium-sized companies like Morris into the arms of large groups like Babcock, GKN and Tube Investments is bad for the health of the economy, since it reduces the number of independent centres of initiative. Merger controls in their present form have not prevented the *continuing* trend towards greater industrial concentration. But the need to preserve the separate existence of small and medium-sized companies, as an end in itself, plays no role *in* British legislation on competition, and public concern about concentration has not yet reached the point where the law is likely to be changed. Thus the discussions over the next few weeks will be concerned with what specific damage, if any, might result from the Morris-Babcock merger, not whether the merger is "right" in the sense of conforming to some ideal view about how industry should be organised.



The chairmen: Mr. P. W. Robinson, of Herbert Morris (left), and Mr. John L. King, *Babcock*

APPOINTMENTS

Broughton Pipkin to head BICC

Mr. C. H. Broughton Pipkin, a deputy chairman and the chief executive of BICC, is to become chairman from January 1. The position of chief executive will cease but Mr. Pipkin will continue to be a full-time executive of the company.

Mr. William Fraser, who is now 65, retires as chairman of the company and from the Boards of subsidiaries from the end of this year. He will continue on a *consultative basis for three years.*

★

Mr. H. M. Thompson has been appointed to the new post of group financial controller, ASSOCIATED ENGINEERING, November 1. Mr. Thompson is currently managing director of A. E. Auto Parts.

★

Because of increasing commitments, Dr. John Treasure is ceasing to be chairman of the BRITISH MARKET RESEARCH BUREAU. Mr. Jack Fothergill will become chairman, Mr. David Wheeler, non-executive vice-chairman, and Mr. Bryan Bates, managing director and chief executive. These appointments *are effective from October 1.*

★

Mr. J. C. Cartwright, MP, has been appointed a trustee of the NATIONAL MARITIME MUSEUM in succession to Mr. N. G. Barnett, MP, who has resigned from the Board of Trustees.

★

The following changes have been made in the southern region of the CUBITTS GROUP. Mr. Ray Groves has become managing director of Holland Hannen & Cubitts Construction (London) with Mr. Bill Hair as construction director and Mr. Eric Lelliott as commercial director. Mr. George Linstead, managing director of Cubitts General Contracts, has also been appointed deputy managing director for the southern region. Mr. Dennis Maile is commercial director of Cubitts General Contracts with Mr. David Spencer as construction director. Director in charge of Holland Hannen & Cubitts (Civil Engineering) is Mr. Brian Lacey. Mr. Brian Pike has been elected to *the Boards of those three com*panies as financial director. The managing director of Holland Hannen & Cubitts (Midlands) is Mr. Richard Shillitoe and Mr. Ken Simpson has become commercial director for that company.

★

Mr. G. A. Johnson, commercial manager, and Mr. J. A. O'Hara, technical manager, have been elected directors of LIVERPOOL CENTRAL OIL, within the food processing *division of the Oriel* Foods Group.

★

Mr. R. K. Rhodes, marketing director of the BRITISH SUGAR CORPORATION, is to retire on medical advice early next year. He joined the company 44 years ago and has been a director since 1965.

★

Sir John E. Hall has been appointed to the Board of EUROPEAN BRAZILIAN BANK, *replacing* Mr. R. B. Botcherby.

★

Mr. Reg Boxall has been appointed chairman and managing director of LYNDAN PRESS, part of the Harrison Group. Mrs. Josephine Cunningham-Prichard and Mr. Hugh Rudkin have joined the Board.

★

Mr. A. P. Humphries, senior partner of Baker Sutton and Co., has joined the Board of HOUSE *OF FRASER in a non-executive* capacity.

★

Mr. Wilfred Rudd has retired as technical director of LCP (TRIM), a subsidiary of the LCP Holdings Group, but remains as *a consultant.*

★

Mr. Denis Dowling, formerly president of the Earl Beach Company of Baltimore, U.S., has been appointed managing director of the new technical coatings division of MARLING INDUSTRIES

★

Mr. David Gates has been appointed a director and Mr. Michael A. Scotcher, an assistant director, of BANKERS TRUST INTERNATIONAL. Mr. Roland Poczka and Mr. Henry Hodgson *have been made managers of the* company, which is the merchant bank subsidiary of Bankers Trust Company, New York.

★

Mr. S. W. Turner, until recently senior partner of Turner Lansdown Holt, has been appointed a non-executive director of GLENGATE PROPERTIES. He will remain a consultant to his former firm.

★

Mr. Stanley Cressey has been appointed a director of CRODA INTERNATIONAL with responsibilities for personnel and public relations in the group.

★

Mr. Stuart G. Errington, joint deputy managing director of Mercantile Credit Company, has been appointed chairman of the EQUIPMENT LEASING ASSOCIATION. He succeeds Mr. Geoffrey Dodsworth, MP, who has completed his two-year term of office. Mr. T. M. Clark, director and chief manager of Lloyds Leasing, has become vice-chairman of the Association in succession to Mr. Errington.

★

Mr. R. G. White has relinquished the chairmanship of EKMAN CLEAVE but continues *as managing director.* Mr. Leslie C. Young, group managing director of J. Bibby and Sons, has joined the Board of Ekman Cleave as chairman.

★

Mr. Donald S. Broyd has been appointed a director of UNIGATE DAIRIES from October 1.

Haw Par has first half loss of $S8.59m.

BY OUR OWN CORRESPONDENT SINGAPORE, Sept. 21.

HAW PAR BROTHERS International has announced a loss of $S8.59m. after tax, minorities and extraordinary items for the first half of this year.

The results, according to the group's interim report released to-day, are not comparable with the net loss of $S791,000 recorded during the first half of last year, due partly to a change in accounting policy and partly to the winding up of the Melbourne unit trust which resulted in no dividends being received from the trust this year.

Losses were largely due to foreign exchange losses, particularly arising from the sale of Haw Par's stake in London Tin. Exchange losses on the London Tin sale, which has now been realised, amounted to $S7.42m. However, this large loss has been partially offset by unrealised exchange gains arising from the group's sterling liabilities, notably the convertible redeemable guaranteed cumulative preference shares of Haw Par (London) Limited.

As a result total exchange losses amounted to $S5.95m. for the first half this year. Haw Par has changed its accounting policy to take all realised and unrealised exchange losses or gains into the profit and loss account instead of to a deferred exchange account.

Group losses after taxation but before minorities and extraordinary items amounted to $S1.96m.

Dividends received from Cheung Kong (Holdings), Island and Peninsular Development, Edible Oil Products (Malaysia) and Far East Safaris (Private) totalled $S1.41m.

However, gross dividends of $S2.67m. from London Tin, paid in June, 1976, were not included.

Haw Par also stated that the interim results include the full guaranteed income from two associated pharmaceutical companies, which is now the subject of a legal wrangle.

Under these arrangements, the group is guaranteed a minimum income before tax of $S2.74m.

Haw Par has thus lodged formal claims totalling $S4.5m. and has demanded payment of all sums due to it amounting to $S1.8m. at July 30 this year.

Haw Par also disclosed that the net asset value is currently estimated at $S1.17 per share which is about 13 per cent. lower than the figure disclosed in its preliminary announcement last month.

No forecast of the full year performance was made but the group anticipates an overall loss after tax, minorities and extraordinary item for 1976.

Borregaard shows losses for first eight months

BY FAY GJESTER OSLO, Sept. 21.

NORWAY'S Borregaard group, which spans wood processing, metals, fats, chemicals, textiles and food, reports turnover totalling Kr.1.6bn (£170m.) in the first eight months of this year, compared with Kr.1.4bn. in the same period of 1975. Even so, accounts, after depreciation and interest payments, show a loss over the eight months.

The report does not specify the amount of the loss.

Commenting on the poor results, Borregaard says the relatively slow international business recovery has meant that several of its divisions—particularly wood processing—are still feeling the effects of the 1975 recession. Subsidiaries exporting to the U.K. have been hit by the falling value of the pound sterling and rising costs in Norway have also impaired profitability, despite the growth in turnover.

Improved results are foreseen for the final four months of this year, however, as demand for wood products increases and the world economy continues to recover.

A sector of the concern which did well during the period was the recently-acquired Stabburet domestic food company, which fulfilled all its sales targets and made satisfactory profits.

SELECTED EURODOLLAR BOND PRICES
MID-DAY INDICATIONS

STRAIGHTS	Bid	Offer	CONVERTIBLES	Bid	Offer
Alcan 9pc 19[illegible]	[illegible]	[illegible]	American Express 4¼pc '87	[illegible]	[illegible]
Aquitaine 10pc 1985	[illegible]	[illegible]	Ashland 5pc 1988	[illegible]	[illegible]
Bowater 9pc 1990	[illegible]	[illegible]	Beatrice Foods 4½pc 1992	[illegible]	[illegible]
Caisse Nationale Autoroutes 9pc 1986	[illegible]	[illegible]	Beatrice Foods 4⅞pc 1992	[illegible]	[illegible]
C.N.R. 9pc 1985	[illegible]	[illegible]	Borden 5pc 1992	[illegible]	[illegible]
E.C.S. 8pc 1986	[illegible]	[illegible]	Broadway Hale 4½pc 1987	[illegible]	[illegible]
E.I.B. 9pc 1985	[illegible]	[illegible]	Canon Camera 7pc 1989	[illegible]	[illegible]
Esso 8pc 1986	[illegible]	[illegible]	Carnation 4pc 1987	[illegible]	[illegible]
Fiso 9pc 1986 Nov	[illegible]	[illegible]	Chevron 5pc 1988	[illegible]	[illegible]
Eurofima 9pc 1982	[illegible]	[illegible]	Dart 4¾pc 1987	[illegible]	[illegible]
Grangesberg 9pc 1985	[illegible]	[illegible]	Eastman Kodak 4½pc 1988	[illegible]	[illegible]
I.S.F. Canada 9pc 1986	[illegible]	[illegible]	Economic Labs 4½pc 1987	[illegible]	[illegible]
Massey Ferguson 9pc '85	[illegible]	[illegible]	Fed. Dept. Stores 4½pc '85	[illegible]	[illegible]
Michelin 9pc 1986	[illegible]	[illegible]	Firestone 5pc 1988	[illegible]	[illegible]
Modo 9pc 1982	[illegible]	[illegible]	Ford 5pc 1988	[illegible]	[illegible]
Nat. Westminster 9pc 1986	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Norpipe 9pc 1986	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Norsk Hydro 9pc 1986	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

EUROBONDS

Good support for Australian issue

BY TONY HAWKINS

CONTRARY TO expectation early in the offering period, the three tranche Australian Eurobond issue of $300m. appears to have been well supported and the seven and 10 year tranches were yesterday priced at par and the 15 year tranche at 99½ as had been indicated.

The seven and 10 year tranche of $120m. each have coupons of 8¼ per cent. and 8½ per cent., while the 15 year tranche of $60m. is being issued at 99½ on a coupon of 8¾ per cent. The yield to maturity on the seven year tranche will be 8¼ per cent., on the 10 year tranche 8½ per cent. and on the 15 year tranche 8.8 per cent. The 15 year issue is repayable in annual instalments over the final ten years to give an average life of just under 11 years.

Lead manager for the issue is Deutsche Bank.

Crédit Suisse White Weld issue managers for the $100m. Crédit Suisse (Bahamas) convertible issue shortened the subscription period for this offer by 24 hours in the face of strong market demand. Telexes are to be sent out this evening in respect of this issue. Indicated terms are a coupon of 4¾ per cent., issue price par and a conversion premium of between 5 and 10 per cent.

Gotaverken of Stockholm—the world's largest shipbuilders outside Japan—is to issue $20m. of guaranteed notes 1983 in the Eurobond market, carrying a coupon of 8¾ per cent. with an issue price of 99.

The Notes will be guaranteed by the Swedish National Debt Office on behalf of the Kingdom of Sweden. Hambros Bank is lead manager and the combined management and underwriting group comprises Bank Gutzwiller, Kurz, Bungener (Overseas), Banque de Paris et des Pays-Bas, Deutsche Bank, Kredietbank Luxembourgeoise, Post-och Kreditbanken, Salomon Brothers International and Swiss Bank Corporation (Overseas).

Gotaverken's shipbuilding order book extends until mid-1978. Since July 1, 1976 Gotaverken has been 51 per cent. owned by the Swedish Government with the other 49 per cent. held by Salenunvest.

In Japan, Sekisui Prefab Homes announced plans for a DM50m. bond issue. It said it would seek Ministry of Finance permission to make the issue.

Nippon Miniature Bearing (NMB) of Japan is planning an Asian bond issue in Singapore, our Singapore correspondent reports. Details of the issue are not yet known but it is believed that it will be about $15m. Lead manager for the issue is understood to be Morgan Grenfell (Asia). The issue will be the sixth Asian bond flotation so far this year in Singapore and the fourth by a Japanese company in the Asian bond market.

TDK Electronics is to issue 3.4m. ordinary shares, with a par value of Y50, with the shares priced in U.S. dollars. The terms of the issue are expected to be fixed on Thursday, September 30 with the share offer price representing a discount of 6 to 7 per cent. from the closing price of TDK shares quoted on the Tokyo Stock Exchange on that date.

Lead manager for the equity issue is Nomura Europe while the other managers are Credit Suisse White Weld, J. Henry Schroder Wagg, and Pierson, Heldring and Pierson.

Costs hit profits at AB Cardo

AB Cardo, the Swedish agricultural, food processing and investment company, reports an increase in turnover of 2 per cent. to Kr.1.03bn. (£140m.) for the financial year May 1975 to April 1976 reports John Walker from Stockholm. The major part of the group's sales come from Sockerbolaget, the sugar subsidiary and amount to Kr.851m. (£113m.), with the balance coming from other subsidiary companies.

Costs the company reports have risen to Kr.880m. (£110m.) compared with Kr.861m. for the preceding year. The operating profit before write-offs amounts to Kr.152m. virtually unchanged from the previous year. The pre-tax profit increased to Kr.205m. (£27m.) compared with Kr.194m. for the year before. The board recommends that the dividend should be increased by Kr.1 per share to Kr.11 per share.

Sandoz acquisition

THE BOARDS of the Swiss chemical concern Sandoz, Basle, and the U.S. seed merchants Northrup, King and Company, Minneapolis, have agreed in principle to a takeover. Sandoz to offer Northrup, King shareholders $19.40 per share. Northrup, King, a leading company in the development, production and distribution of agricultural and garden seeds, booked a turnover for the fiscal year 1974/75 of $168m. writes our Zurich correspondent. Last year Sandoz acquired the seeds business of another U.S. firm, Rogers Brothers, of Idaho Falls.

Sydney SE

Sydney Stock Exchange chairman John Valder endorsed proposals for the formation of a National Corporations and Securities Commission, reports Reuter from Sydney.

He told a seminar the Commission, proposed by Minister for Business and Consumer Affairs John Howard, could result in tougher control of the stock exchanges.

Thomson-CSF

Thomson-CSF said it will create a new division to regroup activities in the computer sector and undertake new developments in the field, reports Reuter from Paris.

Trust Bank profits steady

BY RICHARD ROLFE JOHANNESBURG, Sept. 21.

NET PROFIT inched ahead at Trust Bank of Africa after transfers to inner reserves by R0.1m. to R3.3m. for the six months ended June 30 but earnings per share were down from 9.4c to 7c over the period. This reflected the higher share capital following the 40 for 100 rights issue last December which raised Ordinary shares in issue from 33.6m to 47m.

Striking price for the rights was then 70c per share. Trust Bank closed to-day at 60c, 3c up in a generally buoyant market and with the interim dividend maintained at 3.5c, the chances of an unchanged 7c total look reasonable, putting the shares on a prospective yield of 11.7 per cent.

The directors are not prepared to forecast profits saying it is not possible in the present economic climate, to make accurate predictions. They point to four main areas which adversely affected profits in the review period, all of which were beyond the company's control.

The first is that from the beginning of this year strict credit controls have been applied inhibiting expansion in the volume of business. Liquid asset ratios have been increased affecting earning and capital margins. The rate of corporate tax has been increased and interest rates have risen to unprecedented levels weakening demand and affecting the cost of money.

In a recent review of finance charges, Trust Bank took the unlikely step in the current climate not to apply increased rates to customers "in view of the hardships it would mean." The bank's chairman, Dr. J. S. Marais, is one of the few bankers who has not called for the maximum interest rate to be raised above 14 per cent.

● Tedelex Holdings, the leading TV set manufacturer in South Africa which has carved out the biggest single slice of the 600,000 sets sold so far, has laid off 395 workers or almost a third of the total labour force at its plant at Bellville, in the Cape.

With the present depressed consumer sales market, this retrenchment is not altogether surprising but it has come at a lower point than TV manufacturers originally expected, as saturation point in the local market was believed to be around 1m. sets.

The initial reckoning was also that the ugly moment would not arrive until late 1977 or early 1978. Other manufacturers are hoping to avoid lay-offs on so large a scale. Barlows is introducing a new portable set which it hopes will catch on despite weak consumer demand. Other manufacturers such as Philips hope to switch workers from the TV lines to radio or Hi-Fi production or else in the Service network.

Rationalisation has been widespread among manufacturers in recent weeks and a number of brand names have been dropped. The industry reckons that from a peak of 4,500 when TV started up, the number of retailers will be down to 2,000 by the end of 1976. Tedelex has probably protected its financial position by this decision to reduce labour and the shares were unchanged at 104c in Johannesburg where the prospective yield on last year's 22c dividend is 21 per cent.

● IN a move which could herald a major retailing merger in South Africa, the shares of Ellerine Holdings, S.A. Selected Investment, and Trump Corporation, have been suspended following the initiation of talks between the three companies.

One of two possible developments now seems likely. S.A. Selected and Trump, both of which are controlled by the Trump family, may bid to acquire Ellerine or alternatively Ellerine may be negotiating to acquire Trump's furniture stores in an attempt to consolidate its position in the market for black customers where it sells furniture and durables primarily under hire-purchase contracts.

Ellerine's annual report just published shows turnover up 25 per cent. to R49m. and net worth of 272c against the share price of 145c, up 20c in the two trading days before suspension.

Ellerine shows net current assets of R28m., the bulk of which is its debtors' book. The Trump companies are not particularly liquid at present and so any deal arranged is likely to be a share swap.

Dead heat in Tokyo

BY CHARLES SMITH TOKYO, Sept. 21.

JAPAN'S two biggest securities houses, Nomura and Nikko, reached a virtual dead heat at the beginning of this month in what has become a battle for the biggest turnover on the Tokyo stock market.

Nikko, traditionally the number two securities company, handled 761m shares during the first two weeks of September against Nomura's 750m. In the third week of September, however, Nomura reasserted itself and the totals for the first three weeks of the month came to: Nomura, 1,076m. shares, versus Nikko's score of 1,035m.

Sources at Nikko admitted today that the company has yet to stay ahead of Nomura in share turnover for one whole month, but both companies acknowledge that the gap between the two is being closed.

This is indicated by the fact that Nikko's share of Tokyo Stock Exchange turnover in the 12 months ended last August was up by 2.7 per cent. on the previous year to 14.29 per cent., while Nomura increased its share by a modest 1.08 per cent. to 16.46 per cent.

Nikko's all-out battle to overtake Nomura on the Tokyo stock market dates from the spring of 1975 when its current president, Mr Yoshizo Nakayama, assumed office. He has rapidly gained a reputation for dynamism and the company has adopted a strategy of actively pushing a relatively small number of shares.

The battle to maximise turnover between the two securities giants has been one factor behind the sharp fall in average value of shares traded on the Tokyo market (from around Y400 per share in June to about Y280 to-day). The securities houses naturally find it easier to maximise sales of lower-priced shares. Commissions on the Tokyo market are higher, in percentage terms, on lower-priced shares than on higher denominations.

Nomura's reaction to the challenge by Nikko is that it is "very keen" to stay ahead and "definitely plans to show a bigger turnover." However, it also claims to be taking a wider view of the securities industry than its rival seems to be doing, and is placing heavy stress on the bond market.

W. Germans buy real estate

FRANKFURT, Sept. 21.

A BANK consortium led by Deutsche Bank AG has fully placed with German investors more than DM100m. of shares in a real estate fund that owns 80 per cent. of Houston's Pennzoil Place in what Deutsche Bank officials termed a very well-received investment opportunity.

The shares were first offered in mid-June for 60 per cent. of the new office building, but demand was so strong that the bank consortium exercised its option for another 20 per cent. before the month was over.

The prospectus says investors are sure to realise a 6.5 per cent. to 7 per cent. return on their shares in the first year, which by a special ruling of the U.S. Internal Revenue Service and the tax agreements between the U.S. and Germany, will be tax-free in Germany. The total amount of DM108m. was offered to German investors in shares of at least DM20,000. Deutsche Bank officials said the shares were widely distributed with the majority of the investments falling between DM50,000 and DM100,000.

AP-DJ

Lira devaluation helps improvement in Fiat first half

BY ANTHONY ROBINSON ROME, Sept. 21.

AIDED by sharply increased turnover and the beneficial effect of lira devaluation on higher export sales, Fiat reports improved financial results for the first half of 1976, although it gave no figures. For 1975 as a whole, Fiat reported a tiny net profit of L107m. (£85,000) after depreciation of L205bn. on turnover of L3,750bn. It paid an unchanged L100 dividend last year by drawing on reserves for the third consecutive year.

The first half of 1976, although marred by strikes in the first quarter, saw improvements in several sectors magnified however by higher prices which account for the bulk of the record turnover increase from L1,705bn. in the first half of 1975 to L2,670bn. over the first half of 1976, of which exports accounted for L1,079bn.

The announcement of improved financial results came after a full board meeting today. The company added that part of the improvement was due to consolidation of the medium term debt position and the total elimination of short term indebtedness with the banks which stood at L200bn. at the end of 1975. This was achieved partly through increased cash flow arising from the higher turnover and partly due to new borrowing on a long and medium term basis such as the L100bn. borrowed from the medium term credit institute IMI last January on a ten year basis at an effective interest rate of 12.6 per cent. This compares with the current prime rate of around 19 per cent. on short term bank borrowing.

However the improvement is clearly of a "so far so good" nature as the board voiced considerable concern over future prospects in the light both of the new "once only" tax just imposed on motor vehicles to help finance earthquake reconstruction work in Friuli and the prospect of higher petroleum prices this autumn. These are expected to be major depressing factors on new vehicle sales in the seasonally slack autumn/winter period.

Another negative factor is the certainty of a further rise in labour costs and possible strikes arising out of the new labour negotiations due to start in November. The negotiations cover the application at a plant level of the national engineering contract finalised last April after strikes which cost the group an estimated 85,000 lost vehicles.

The unions have just published the outline of their negotiating position and demands.

The higher salary aspect of the demands have not yet been finalised but the unions priorities are that of ensuring new employment to replace the net reduction of 15,000 jobs through natural wastage over the last three years, higher investment in the south and negotiations to change mid-week religious holidays into a fourth holiday week. The unions are also insisting on their scheme to organise plants in southern Italy on a three shift, six hour per shift, six day per week basis, a scheme which theoretically permits higher plant utilisation and higher employment.

The union platform insist on continual contacts with management and the right to be informed and discuss production schedules, new investment projects and working conditions generally.

They propose new facilities to produce the Fiat 127 model at Cassino or Termini Imerese in Sicily, new truck plants in the south, expansion of the Grottaminarda bus plant to employ 2,300 workers, a decision to go ahead with the car-derived light van project initially conceived at the government's request as an alternative scheme for the Innocenti plant in Milan as well as numerous suggestions for improved working conditions.

The negotiations promise to be complex and lengthy.

● Istituto Finanziario Industriale (IFI), the holding company through which the Agnelli family control Fiat and other financial holdings, reports a loss of L121m. for the financial year ending June 30 and proposes to omit the dividend.

The loss will be covered by drawing the L21m. not distributed as profit last year plus L100m. from the extraordinary reserves and at the same time proposed to revalue assets by L41bn. under the terms of the so-called Visentini law of December 1975.

This year's loss follows a profit of L8.2bn. in financial 1975, when IFI paid a L50 dividend on privileged and L80 on ordinary shares.

Substantial losses by several companies in the IFI portfolio and mounting interest charges on debts account for the loss and IFI is now engaged in selling off assets, like the recent sale of its stake in the SAI insurance company and the Isab oil refinery to the Liquigas Group, in order to raise cash and reduce debts.

There have been persistent rumours that managing director Gianluigi Gabetti was due to be replaced following the company's disappointing performance but a company communique shows that chairman Giovanni Agnelli went out of his way to scotch these rumours by praising "the prudence and courage" demonstrated during a difficult period.

Landerbank issues first group balance-sheet

BY PAUL LENDVAI VIENNA, Sept. 21.

LANDERBANK, the number two in Austrian banking, has just issued its first-ever group balance sheet which reveals that the combined assets of the bank and three associated credit institutes reached Sch.75.3bn. (£2.44bn.) at the end of August this year.

The group includes Landerbank, OCI, a regional bank and the hire purchase bank Antofina.

Announcing the figures the director-general and chairman of the board Dr. Franz Ockermueller added that the balance sheet of the Landerbank itself expanded by 9 per cent. to Sch.61.4bn. during the first eight months of this year. Foreign business accounted for 24 per cent. of the group balance sheet, he said.

The director-general expressed satisfaction with regard to the growth of business and earnings situation at the bank. He indicated that a 10 per cent. dividend will be paid this year on the higher capital which was increased by Sch.300m. to Sch.900m. As the new shares were issued at 180 per cent. of par, the bank's resources grew by Sch.540m.

However, Dr. Ockermueller gave notice of his determination to seek a further capital increase in talks with the Treasury. The Landerbank belongs to the nationalised sector as the Federal state has a majority holding in it.

During the first eight months commercial loans by the bank increased by 12.1 per cent. or by Sch.3.1bn. This reflects the consequences of the economic upswing. Balanced growth rather than expansion at any price characterises the general business policy of the Landerbank, Dr. Ockermueller stressed. With regard to the industrial holdings of the group the director-general was satisfied with performance.

U.S. COMPANIES

Kennecott to act on Peabody sale

DENVER, Sept. 21.

KENNECOTT COPPER CORP. said that it expects its board to vote "within the next few weeks" on a proposal to sell the company's Peabody Coal Co. unit to Utilities Group Inc. In papers filed with the U.S. Court of Appeals for the tenth circuit, Kennecott stated that it has "almost completed negotiation of the terms of a definitive agreement" with Utilities Group and that Utilities Group "has completed its financing arrangements and is in the process of receiving formal commitments from major lenders."

Utilities Group is composed of Martin Marietta Inc., Transco Cos. and six electric utilities. Kennecott formally rejected a proposal from the group last June, but the terms subsequently were "quickly improved," the affidavit stated.

The filings with the Court indicate that Utilities Group is the front-runner in the race to acquire Peabody but they leave open the possibility that another group, headed by Newmont Mining Corp., could be the eventual purchaser.

The Utilities Group offer is "expected to be presented to Kennecott's board for action at a special board meeting within the next few weeks," stated Gordon Fisher, Kennecott Vice President, in an affidavit. But "discussions at the top corporate level between Kennecott and members of the Newmont Group are scheduled this week," he added.

The Newmont Group was long considered by many observers to be the leading competitor in the race, because it has stated for more than a year that it already had the financing for its offer, while other bidders didn't. The group includes Newmont, Texasgulf Inc., Williams Co., Fluor Corp. and Equitable Life Assurance Co., who are bidding for Peabody's U.S. operations. Broken Hill Pty., an Australian company, has made an offer in conjunction with the group to buy Peabody's Australian operations.

The documents also describe Kennecott's previously announced proposal to spin off 80 per cent. of Peabody's shares to Kennecott shareholders and to sell the remainder to an individual purchaser. They suggest, however, that this alternative is not as attractive to Kennecott management as is a sale.

AP-DJ

J. C. Penney expands

NEW YORK, Sept. 21.

J. C. PENNEY COMPANY, Inc., increased its estimate of the amount of new store space it expects to open during the 1976 fiscal year. The announcement was made by chairman Donald V. Seibert at a meeting for securities analysts held at J. C. Penney's New York headquarters.

J. C. Penney now anticipates that the net addition to new store space will exceed 7.5m. gross square feet. An earlier projection of 5.5m. gross square feet was announced last November, but subsequently the company indicated that acquisitions of vacated retail space would augment this estimate.

Mr. Seibert reported that the increase will result primarily from the opening of approximately 75 J. C. Penney stores instead of the 40 originally forecast. The additional stores are existing space that has been vacated by other retailers. Approximately 23 of the new units are former W. T. Grant locations.

As a result of the expanded store opening programme, the company has also raised its estimate for capital expenditures in fiscal 1976 to about $280m. from its original projection of approximately $265m.

Sandoz deal

MINNEAPOLIS, Sept. 21.

NORTHRUP KING AND CO. said its directors approved an agreement in principle with Sandoz AG of Switzerland for the cash purchase of Northrup by Sandoz for $19.40 a share.

The transaction is subject to approval of a definitive agreement by the directors and shareholders of Northrup King and the officers of Sandoz.

Reuter

Brazil develops

By Sue Branford SAO PAULO, Sept. 21.

THE CREATION of a new subsidiary of Petrobas, the State-owned oil giant, was approved yesterday by the National Oil Council. The new subsidiary will be called Potassio Mineracao SA and, in an initial phase, will mine the extensive potassium reserves in Sergipe in north-east of Brazil, which have been estimated to be worth $US600m. General Oziel Almeida Costa, the president of the Council, said that the subsidiary may form joint ventures with private companies.

FINANCIAL TIMES REPORT
Wednesday September 22 1976

Italian Textile Machinery

Textile machinery is one of the most important sectors of the Italian engineering industry. Major efforts have been made to combat the effects of recession and there are signs that these may be paying off.

...gns a ...tter ...ure

...port was written ...S DAVID

...E Italian textile ... industry the past ...s have brought some ...t ...ast year's major ...ay now be bearing ...t. The International ...lachinery Exhibition held regularly in a ...European centre once ... years, took place in ...t October, and with ...isitors proved to be ...t so far in terms of ... if not orders.

Italian producers are ...rting that with the ...xtile industry picking ...from recession even ...hat slowly, contracts ...ing the exhibition are ...ewed. Business in the ... months of this year, ...to a report presented ...uropean partners by the Italian Association ... Machinery Manufac... ... up on the depressed the same period last ... a further improvement ...for. ...ese forecasts prove correct it will come as a substantial relief to the Italian textile machinery industry which ranks among the most important of the Italian engineering sectors, exporting 75 per cent. of its output and earning a trade surplus for the Italian balance of payments. Total exports have grown from lire 140bn. in 1972 to lire 290bn. in 1975, though the decline in the value of the lira—down more than 20 per cent. against the dollar since the end of 1975 alone—means there has been a much smaller increase in volume of sales. Imports, again affected by devaluation, have increased over the same period from lire 94bn. to lire 170bn.

Concentrated in Northern and central Italy with major centres at Milan, Busto, Brescia, Biella, Florence and Vicenza—all areas of major textiles activity—the industry employs around 28,000 people and like other textile machinery industries in Europe in recent years has developed along *specialist lines. Through companies* such as EGAM, the state textile machinery concern employing around 5,000 people, and through Marzoli one of the main private sector concerns, Italy is one of the principal world suppliers of spinning machinery.

Italy also provides much of the specialised finishing equipment used to dye, bleach, dry, print or coat fabrics after weaving or knitting, and has been responsible for some of the main developments in knitting technology through Billi and its affiliates in EGAM's Matec group, and through various private sector companies such as Mecmor.

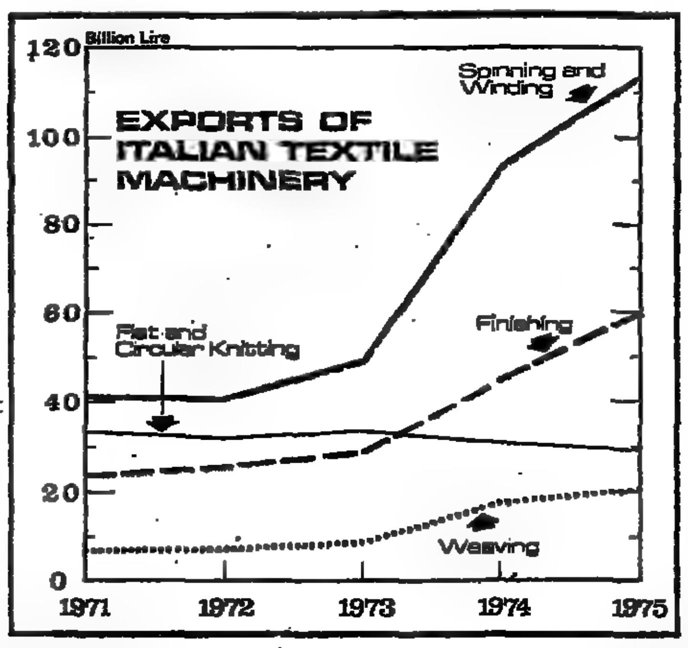
By contrast, though Italy still has some important weaving concerns such as Galileo, this sector internationally is now dominated by the Germans, Swiss and French. In product and often one of the Italian industry is closest to the U.K. which through Platt-Saco Lowell and the Bentley group is the leading world producer of spinning and knitwear machinery, and often one of the Italian industry's main competitors.

The major problem faced by the Italian textile machinery industry, as by its counterparts in *other European countries* over the past few years, has been the decline in activity by European textile producers. In Europe the combination of lower consumer spending on textiles and higher imports has brought a reduction in textile output of 4 per cent. in 1974 followed by a further 6 per cent. decline in 1975. Although some recovery is expected this year, sharply reduced profits, and in many cases losses, by *leading companies and in particular* the fibre producers, have weakened the industry's ability to re-equip with new machines.

Alternatives

For some time the textile machinery industry has been *highly international, seeking to* balance a decline in one market with sales elsewhere. Like its counterparts elsewhere in Europe the Italian industry has been forced to step up its efforts to find alternative outlets outside Western Europe. In Italy's case these have been chiefly in Eastern Europe *over the past* few years, for while exports to the rest of the EEC declined as a proportion of total sales abroad from 27 per cent. in 1972 to 15.5 per cent. last year, sales to the Comecon bloc climbed from 10 per cent. in 1972 to 29 per cent. in 1975.

Sales to Africa, South America and Asia have also risen as a proportion of total exports, but North America like Europe has seen a decline *from* 19 per cent. of total sales in *1972 to around 7 per cent.* last year.



The success of the Italian textile machinery industry in Eastern Europe *owes much to* its product profile. With 40 per cent. of its output in the spinning sector the industry is strong in an area of particular interest to countries starting to build up textile industries. Big groups like EGAM and Marzoli are also able to offer complete *plants to developing countries,* from the early fibre processing stages, such as carding, to winding.

The big rise in exports to Eastern Europe coincides with the delivery by EGAM of several new wool spinning plants to the Soviet Union. *Mainly as a result of this,* exports to the USSR, which totalled L2.5bn. in 1972, climbed to L45.7bn. in 1975. Big increases in sales have also been achieved in other countries developing wool or cotton textile industries, among them Iran up from L1bn. in 1972 to L8.7bn. in 1975, Iraq up from L0.453bn. to L7.7bn., Brazil up from L2bn. to L8.2bn., and Peru up from L0.654bn. to L5bn.

This deep involvement in newly developing textiles markets does have drawbacks, however, as well as advantages. On the positive side the Italian industry has won a valuable foot*hold in a number of important* markets such as the Middle East and South America. These could show considerable growth over the next decade as the pace of industrialisation increases. The industry's success in these markets and Eastern Europe has helped it to maintain reasonable *order books during the recession.*

Competition for sales in these markets can be very keen, however, driving prices down, particularly during a time of recession, and the technological content of the work involved is likely to be somewhat lower than for developed markets.

It is for this reason that an improvement in business *in the* more traditional European and U.S. markets would be particularly welcome to the industry, enabling it to get down to the *task of sorting out some of its* own internal structural problems.

One of the main strengths of the Italian textile machinery industry has been the combination of entrepreneurial and technical skills to be found in many of the small and medium-sized companies. As a result they have come up with original and important new developments in a number of fields. The strong position of *the Italian textile industry* in world markets, for example, owes much to the development of special finishing techniques by the industry in association with the manufacturers of dyeing, drying, bleaching, steaming and other similar equipment.

Nevertheless many leading manufacturers admit that substantial rationalisation of the industry is required. Apart from one or two big companies like EGAM which employs some 5,000 people, or roughly 20 per cent. of the industry's total labour force, manufacturing is split *among about 300* companies, some of them employing only a handful of people. In addition, as in the Italian textile industry, some companies employ outworkers. Though this gives the industry flexibility, it can also deny all but a few big companies the scale *of operations which is required* to carry out the research and development necessary to stay competitive in the long term in world markets.

Furthermore, it will increasingly be very highly sophisticated products which only a few countries will be capable of producing which the developed textile industries in the West *will be seeking to purchase.* Only in this way will the industry be able to keep ahead of the newly emerging textile nations. Manufacture of less sophisti*cated textile machinery may* itself be undertaken under licence by the developing countries themselves.

Rationalisation

A *major* problem militating against any substantial rationalisation or further grouping of the industry into bigger and more powerful units, however, is the current economic and political situation in Italy. Italian Government policy makes it virtually impossible to reduce the size of the labour force where more efficient *methods of production become* available, and although some textile machinery manufacturers, notably the loom builder Giani, have closed in recent years, the tendency has instead been for state money to be made available to maintain weaker concerns.

One result has been to delay the rationalisation of the knitting machinery sector which expanded dramatically in the late 1960s to meet fast-growing world demand for jersey-knit fabric. It has since suffered massive overcapacity, partly as a result of changes in fashion.

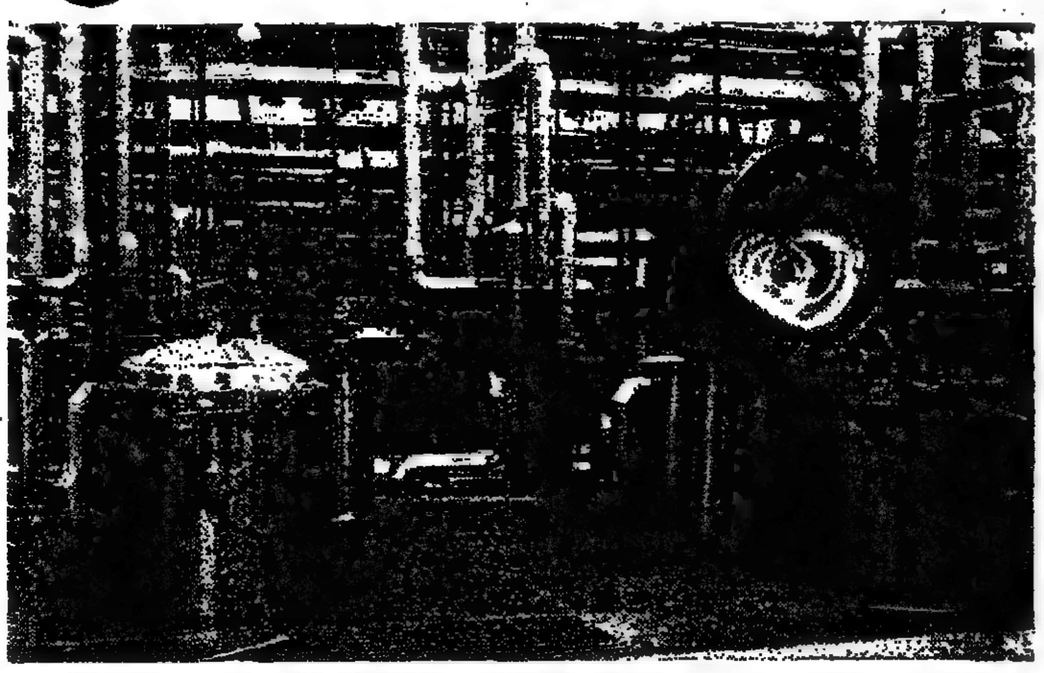
Political and economic uncertainty in Italy itself adds another dimension to the problems of the textile machinery *sector by increasing* the difficulty of selling on the home market. Though the dire predictions of political turmoil made immediately before the elections last June have not been borne out, investment by the industry's customers has nevertheless been slow.

This is *partly* due to the general textile recession and also to the *high level* of inflation in Italy which has meant companies have been able to make only a very poor return on their capital. Much of the investment by Italian textile manufacturers has been taking place in sectors where domestic machinery manufacturers cannot adequately meet market requirements. Italian demand for weaving machinery—much of it for use by the strong domestic wool textile industry—has helped to give Italy a substantial deficit in trade with West Germany in textile machinery. Total imports reached L.67.4bn. in 1975—nearly double the figure three years earlier—while exports to Germany actually declined from L.13.6bn. to L.12.4bn. over the same period. *Imports from Britain totalled* L.13bn. and exports L.10.4bn., while France supplied equipment worth L.16bn. and purchased machinery worth L.11.9bn.

Whether or not the Italian textile machinery industry does succeed in making the adaptations required is *likely* to depend in the first place on political and economic circumstances within Italy. The industry has its strengths in certain important areas, such as yarn processing and finishing, and the position it has built up in the developing and State trading countries—the big textile machinery buyers of the past few years—on which to base its efforts. Much is also *going to depend on whether* its European customers can also recover their strength.

ITALIAN TEXTILE MACHINERY II

Dyeing is still big business



Italian designed dyeing equipment.

PERHAPS THE best-known feature of Italian textiles is colour and design—an ability to bring fabrics to life which often eludes the textile industry of other parts of Europe. But while much of the talent for this is in the mind and eye of the designer, for transmission of his ideas he has traditionally been very dependent on the strong Italian textile finishing industry.

Literally dozens of companies, some of them very small, specialise in the manufacture of equipment for dyeing, bleaching, drying, steaming and printing of textiles, and in textile factories around the world much of the equipment used in these processes is Italian.

In the dyeing field much of the effort is currently being concentrated on cost reduction, and a number of new machines which are intended to achieve this have been developed. Unless efficiently controlled, dyeing can be very heavy on water, dyestuffs, and energy. Even though Italy and the Milan region — one of the main textile areas — have been suffering from one of the wettest periods in recent memory (unlike the U.K.) water charges still have to be paid. And dyestuffs and energy both have to be imported almost entirely from outside.

Among new developments, the ILMA company, one of the leading manufacturers of dyeing machinery, has recently brought out a machine for low pressure dyeing of piece goods sewn together in rope form to a maximum weight of 200kg. The fabric circulates in a bath of dye liquor, and significant savings in dyestuffs are claimed. Another rope dyeing system has been developed by Mezzera of Milan which can be used for woven and knitted fabrics. In the jet dyeing field a number of companies, including MCS of Urgnano, have brought out new generation machines which again claim to be able to offer significant reductions in dye usage.

Lower cost

The dyeing field in particular has been allied to Italian electronic skill to enable extremely sensitive computer control of dyehouse operations to be achieved—again with the aim of reducing costs by more efficient use of raw materials and lower manning level requirements. The small Lukas concern which operates from Usmate 20 miles from Milan, has won a number of orders from Italy, the Middle East and Eastern Europe for automation of dyehouses, and has launched a new computer-controlled system which will handle all aspects of dyehouse operations from the dyeing process to administration of stocks.

The company's basic system is a process controller operated by punch-card. This controls and monitors dyeing operations, stopping the programme automatically where given margins for temperature, dyestuff feed or other inputs are being exceeded. Significantly, outside Italy most interest in the system has been shown in countries with newly-developing textile industries, lacking skilled manpower and a tradition of dyeing technology.

The system has enabled these new operations to achieve very high standards of dyeing very quickly, helping to make their products more acceptable in Western markets. In parts of Europe, according to the company, there remains a degree of reluctance to commit dyeing operations wholly to automation, with many companies preferring to rely on the skills of dye technologists in key operations. The chief dyer and his team very often have to be convinced that their skills are not being undermined before they are prepared to accept fully automated dyehouses, Lukas claims.

Users of Lukas's system are generally trained in Italy for a period of several months in the company's technical assistance section and in customers' plants using Lukas systems. At present there is much more willingness on the part of developing countries to send their technicians to be trained in Italy than on the part of sophisticated producers in Western Europe.

The situation is now changing, however, and Lukas, which claims to be the biggest supplier of automated equipment for dyestuff plants in Italy, expects growth in demand from Europe to grow as more and more attention is paid by European dyeing companies to efficient use of materials. The Lukas system is built up on a modular basis consisting of individual process controllers suitable for small dyehouses and capable of being linked together for bigger units. In very large installations the plant can be completely computerised including programming of machines and stock-keeping. The company uses Computer Automation equipment for which special programmes embracing complete dyehouse operations have been written.

Lukas is capable of building around 50 process controllers a month at present using its own relatively small labour force, and, in true Italian fashion, a network of compenent suppliers and outworkers for parts assembly. The company depends in part for sales on close links with big Italian dyehouse machinery manufacturers such as ILMA and Bellini who are able to introduce it to export markets. Some of the big companies like Mezzera make their own process control but will also use Lukas equipment where specified.

With the world textile recession depressing orders for completely new dyehouse plants, particularly in developed markets, an important element in overall sales has been represented by automation of existing dyehouses, a move a number of companies throughout Europe have decided on to reduce costs.

Problems

But while the Italian textile machinery industry has recently been experiencing something of a recovery in demand for finishing equipment with exports last year, mainly to developing countries, increasing from L25bn. to L36bn., knitting machinery problems still remain.

Italy together with Britain has traditionally been one of the leading suppliers of machinery for weft knitting—a sector which enjoyed a tremendous boom in the late 1960s and early 1970s but which has been plagued by over-capacity since then. Europe's weft-knitting industry geared up in the late 1960s to meet American demand for fabric, but with U.S. producers moving in to meet domestic market requirements and the public swinging away from knitted to woven garments, machines throughout Europe have been standing idle for the past few years and companies have not been making sufficient profit to invest in new and more sophisticated equipment.

Italy's exports of weft-knitting machinery were down around 30 per cent. in value last year compared with 1971 despite the massive decline in the value of the lira over the intervening period. The main producers claim business has been moving slowly this year as well.

Nevertheless Italy remains a significant force in knitting machinery, particularly in ladies' hosiery where the Billi company was responsible for some of the leading developments worldwide in the late 1960s. Billi's achievement in a field dominated until then by companies in the British Bentley Group was to produce multi-feed machines capable of drawing on up to 72 yarns instead of the 24 yarns used at the time—a development which had dramatic effects on production speeds.

Billi was badly affected by the downturn in demand in the early 1970s ending up in the embrace of EGAM, the state textile machinery company where it is now part of the Matec knitting machinery division.

The group has continued in the forefront of technical development in women's hosiery, however, developing machines for making the new seamless tights, and it has had close links with one of the big U.K. women's tights manufacturers, Pretty Polly.

It has developed a machine, the Zodiac 8 Complett, capable of producing a complete panti-hose in three minutes and has recently patented a new production method which enables tights to be manufactured in one work phase without interruption.

While technical developments have been an important factor in the success of the tights manufacturing sector, the producers have also been able to draw support from the very large investment programme in tights manufacture in Italy, a programme which has drawn criticism from other European countries and the EEC.

In fact, a recent report drawn up for the EEC painted a gloomy picture of the tights industry's problems. Over-production in Europe was put at 45 per cent. Prices were estimated to have fallen by around 9 per cent. per annum over the period 1970-74 yet still to have failed to prevent the market from falling in size. Despite serious over-capacity—and a relatively low level of tights usage by Italian women—Italian producers have gone in for substantial investment in a bid to capture a major share of the market, and now provide about half the made-up production of tights in the EEC. Much of the making up has been transferred by companies in other countries to low cost areas in a bid to maintain competitiveness.

In other knitting fields Matec's latest development is a new circular warp-weft knitting machine, the Saturnia, for producing cloths, flannels and furnishing fabrics which it claims offers productivity three times as great as conventional looms, greater versatility and simpler production methods.

Broadly based workforce

ALTHOUGH THE Italian textile machinery industry exports about 75 per cent. of its output, the role in its success played by the domestic textile industry is still of considerable importance, and could become much more significant in the decade ahead. For, while the textile industry throughout much of Western Europe has been contracting, the Italian industry has been emerging as a stronger force in world markets, and if the current ambitious plans of the major fibre groups are an indication, is determined to play an even bigger part in satisfying European textile needs over the next few years.

Against the trend elsewhere, employment in the Italian textile and clothing industry has actually increased over recent years to around 900,000, and represents some 18 per cent. of total manufacturing employment in Italy. If outworking or "family working" is also taken into account the total rises to 1.24m. Under this system companies put out parts of the manufacturing process to workers at home, causing allegations of unfair competition to be levelled by other textile producers in Europe, who claim Italian companies can in this way reduce costs by avoiding social and other charges accompanying full-time employment.

The build-up has coincided with increased Italian penetration of export markets—mostly in Europe—with some 40 per cent. of the industry's total production, valued at around L7,000bn. in 1975, going to export markets. As Italy, like Britain has suffered prolonged balance of payments difficulties, with the deficit in the first six months of this year exceeding L2,500bn., textiles and clothing have represented a valuable trade surplus—unlike Britain, where the clothing sector in particular, now returns a sizeable deficit.

With this sort of record—based on the deserved reputation of Italian textiles for good design—the sector has received a lot of help from the authorities, making it possible for manufacturers in the traditional textile areas to expand, and also encouraging them to invest in Italy's deprived areas.

In Tuscany, which includes Prato, near Florence, the centre of the highly-competitive Italian wool textile industry, employment in textiles and clothing provides work for more than 140,000, including family workers. Textile employment accounts for around one-quarter of all jobs in manufacturing in the area, though significantly a very large proportion is employed in factories with less than ten workers. In Lombardy, the area around Milan—also the main centre of textile machinery manufacture—employment in knitwear and hosiery has grown over the past ten years, going a long way towards compensating for the decline in the cotton sector. Knitwear and wool textiles have also traditionally been important in Piedmont, the area around Turin, and Venetia, with the Rome region one of Italy's main clothing manufacturing centres.

Attempts to bring industrialisation to poorer areas of Italy have also resulted in a substantial growth in textile and clothing employment in Southern Italy where some 200,000 people—rising to 300,000 if outworkers are included—are now employed in the industry. With traditional textile manufacturing process firmly established in other areas the South has concentrated on areas of textile manufacture relatively new to Italy such as floor-coverings, and non-woven material, though clothing because of its high labour content has also been introduced into the area, and now employs around one-third of the total textile labour force.

With the Government supporting the expansion of the industry, Italian textile and clothing producers have managed to survive the recession in somewhat better shape than the industry in some other countries. With export-led growth continuing, the industry recorded a strong recovery in the first half of this year, and production increased by an estimated 20 per cent. despite a drop in the domestic market.

Many problems remain to be sorted out in the textiles and clothing sector, however, in particular the excessive fragmentation of the industry. Even

CONTINUED ON NEXT PAGE

ITALIAN TEXTILE MACHINERY III

Spinners on top

WHILE MUCH of the strength of the Italian textile machinery industry has traditionally been based on small and medium sized companies, it has also been recognised over recent years that much bigger enterprises capable of operating on a world scale are also needed if the Italian industry is to remain as a major force alongside the international giants dominating world markets.

In textile machinery, national boundaries mean very little, partly because the market in any one type of high volume textile equipment is likely to be relatively limited even in big textile *producing* countries such as Britain or Germany. The shift of textile production to the developing world has also helped to internationalise the industry, which in most cases has to look outside Europe for the bulk of its sales.

The technological complexity of modern spinning, weaving and knitting machinery means there is very little scope for new entrants, and companies throughout Europe which have been unable to spread their activities beyond their own national borders have generally had to withdraw into a specialised field of production or go out of business. With the exception of Germany, where all branches of textile machinery manufacture are represented, most countries in Europe now specialise in certain sectors, with Britain for example strong in spinning, knitting, and carpet machinery but weak in loom-building, an area dominated by the Germans, Swiss and French.

In the case of Italy the main sector where a world scale manufacturing capacity has been retained is in spinning, and, as might be expected, this has been largely achieved through State intervention. EGAM, a conglomerate embracing also mining and metals, is through its textile machinery group, headed by the sales company Simates, probably the second biggest world producer of spinning machinery after Britain's Platt-Saco-Lowell, part of Stone-Platt.

Comeback

EGAM's textile machinery interests have been built up by grouping together a number of companies with different specialities, some of them, notably Savio the winding machinery manufacturer, rescued from financial difficulties. The company points to its broad base covering the various different machines required at different stages in spinning manufacture as an important selling point. This enables it to offer a range of equipment from the early stages of fibre processing, such as combing and carding to high-speed winding. In addition to spinning, EGAM also has a knitting division—Matec—which includes the former Billi concern, a victim of financial problems in 1971, and is attempting a modest comeback in weaving.

Through the EGAM group as a whole, Simates claims to be able to offer complete turnkey projects from choice of location, engineering, building, equipment supply to personnel training in any language, but as yet no total system of this kind has been sold. A number of contracts to supply complete textile operations—without the preliminary survey and engineering work—have been secured in Eastern Europe, the Middle East and in the developing countries.

Under an L80bn. deal which has been helping to boost Italy's textile machinery trade surplus with the Eastern block for the past few years, Simates is supplying nine wool spinning plants, manufactured by its affiliates, to Russia. Other cotton and wool spinning plants have been supplied to Iraq, Korea, Turkey and Peru.

The company has found it much more difficult to sell in advanced European countries during the present recession but has derived some protection from the worst effects of the downturn through the strong links now established particularly with Eastern Europe and with developing countries anxious to establish a textile industry to take advantage of indigenous sources of raw material such as cotton.

In cotton spinning it is now essential for the major producers to be able to offer within their ranges the open-end (OE) system of spinning using a rotor instead of conventional spindles, a development which is taking an increasing share of new textile installations, particularly in developed markets. EGAM has licensed a Czech system and claims to have eliminated early problems with this, and has sold about 300-400 machines.

Roughly 30 per cent. of sales are currently OE but the company expects OE to take a 50 per cent. share of the market alongside conventional spinning frames within the next few years, with most of the sales going to developed markets which can take the best advantage of the lower labour costs of operating the system, as well as being able to afford its higher capital cost.

The company, which last year had a turnover of L86bn. and employs a total of 5,000 people, is hoping for significant sales, too, of one of its own technical developments which can cut down on some of the early processing required in the preparation of man-made fibres for OE spinning. Its cotton-spinning system, tow to top, transformer line — currently being evaluated by Deering Milliken the technologically orientated U.S. textiles producer — cuts out carding, and as a result offers prospects of reduced working times and costs. The system is also on trial with an Italian cotton system spinners.

In wool system spinning the company's *main recent* development is a rotating head drawing frame which gives faster delivery and higher output than the traditional screwhead system. The system also has the advantage of reduced noise levels and lower maintenance costs.

EGAM has also become involved in recent years in the manufacture of equipment for producing continous filament man-made fire, including draw texturing machines. The company has developed a new high speed take-up frame delivering partially-orientated yarn at 4,000 metres per minute to supplement its standard frame working at up to 2,500 metres per minute. In draw texturing the aim is to compress yarn production stages, eliminating the separate drawing stage between spining and texturing, and enabling the fibre producers to offer a textile yarn ready for use from their plants. In this field EGAM has recently unveiled a new machine known as *the STC, capable of texturing,* that is adding bulk to the yarn, at speeds of up to 800m. per minute.

While EGAM is competing in world markets to supply the machines processing the main fibres used by the textile industry such a cotton and polyester, some of the more specialised companies in Italy have also come up with interesting developments, particularly in the exploitation of polypropylene. This fibre was invented in Italy leading to a high level of usage by Italian industry and to continued technical development.

A central control system supplied by Lukas at the Tintorio Emiliana Stefani dyehouse near Milan.

Extensions

Among the companies producing machinery specifically for use with polypropylene, Ackermann Italia of Milan is now offering a new development of its horizontal line for spinning, stretching, crimping and baling polypropylene yarn from the polymer chip stage. Ackermann's line, which uses a system of extruders to convey pellets to the dye heads, has been extended from eight to 16 spinnerettes and is capable of producing as much as 300kg per hour in the 12-15 denier range.

Ackermann claims the horizontal system of spinning the fibre—first devised by Mackie in Northern Ireland—offers considerable savings over a conventional vertical line, and has so far sold its eight of 16 spinnerettes to around half a dozen customers in Italy as well as to export customers in Belgium, Germany, Poland, Spain and Brazil. The system is proving particularly attractive to producers of low-cost *carpeting who needlepunch the* fibre produced by the line and coat it with wax to give it stability before applying a layer of foam. Advances in printing polypropylene—a notably difficult fibre to apply colour to because of its lack of absorbency—have made it possible to produce patternings on the completed carpets. Other companies are using the line to produce fibre for blankets and other similar applications.

The development is unlikely to make much impact on the carpeting sector in the U.K., which has a higher level of carpeting usage and higher standards than the Continent generally, but the cheapness of carpeting produced by the system, which can be half that for normal tufted carpets, could enable new *markets* for carpeting to be developed in countries in the Mediterranean or in the developing world where demand is poor.

The company is also a producer of equipment for production of polypropylene multi-filament yarn, which includes among its applications protective clothing, filter cloths and other industrial and agricultural uses. Through its associates Ackermann is developing new techniques for multifilament polypropylene texturising. Polypropylene is again a very difficult fibre to texturise because of its "memory"—its tendency to want to revert to its original form.

These represent some of the developments being undertaken by Italian yarn processing companies but they form only a small part of the total picture. Another traditional area of Italian expertise which has become even more important in recent years has been the special techniques developed to ensure that high cost fibres such as wool are fully utilised, through cutting down waste to a *minimum* and reusing waste where possible.

Helped by the domestic textile machinery industry which has drawn on innate Italian inventiveness to come up with new ways of recovering wool, the wool textile industry around Prato near Florence has become the most competitive woollens producer in Europe (though the industry in other countries including Britain would argue that other factors have also been at work including much less stringent control over employment practices).

Nevertheless in the wool recovery trade Italian machinery has played its part by enabling the industry to obtain the materials it requires efficiently and cheaply. Though the woollens industry in other European countries has been severely reduced in size, Italian textile machinery producers are now displaying a greater willingness to offer their products more widely to export customers. While only a small part of the total industry, it helps to add up to a comprehensive Italian involvement in all aspects of yarn preparation and spinning.

Workforce

CONTINUED FROM PREVIOUS PAGE

without the outworker system, some 15 per cent. of employees in textiles and 35 per cent. in *clothing are in companies* employing fewer than 10 people. As in other sectors of the Italian economy, however, rationalisation is difficult to achieve against a background of 2m. unemployed. Although there is State involvement in textiles through GEPI, the reorganisation of the industry into bigger units is likely to be a very long and slow process.

The extent to which the Italian Government is relying on a strong performance in markets around the world from *textile and clothing is indicated* by the sanctioning over recent years of major expansions to Italian man-made fibre capacity—the main raw material used by the downstream textile and clothing industries.

Last year man-made fibre producers in Europe managed to lose some £500m. between them, including a loss of £75m. by Montefibre, the biggest Italian producer. Plants this year are still running way below capacity though they have climbed from the 50-60 per cent. utilisation rates experienced in some cases *last year. Prices are still very* low, and total fibre growth rates over the period 1973-1980 are not expected on some forecasts to exceed 1.7 per cent. per annum, though synthetics will grow faster as a result of the anticipated fall in the share of the market held by cotton, and cellulosic fibres such as rayon.

A major problem has of course been the high level of imports from developing countries of fibre, fabric and clothing, affecting the sales of the man-made fibre producers and of their customers, and strong pressure is being exerted by the industry on Governments throughout Europe for changes in the GATT Multi Fibre Arrangement which regulates world textile trading, to prevent further erosion of the European industry's share of the market.

Nevertheless, though over capacity is currently a major problem facing the European fibre industry with companies in a number of countries seeking to eliminate surplus plant, the Italian industry is planning to become a much bigger force in Europe. By the end of next year theoretical fibre producing capacity in Italy may have increased to exceed that of Britain, making the Italians the second biggest producers in Europe after West Germany.

Expansion

Much of this activity is concentrated in Sardinia, where new plants qualify for Government assistance available to industry willing to invest in areas of high unemployment. The latest surge in expansion is being undertaken by SIR, Italy's third biggest chemical company after the two state corporations, Montedison and ENI.

SIR, privately owned by Signor Nino Rovelli, is a relative newcomer to the fibre business. It has just opened a 25,000 tonnes a year acrylic plant in Sardinia to add to its existing 20,000 tonnes per year polyester staple facilities. Other plants planned by 1980 by SIR include a 30,000 tonnes a year polyester filament plant and further 40,000 tonnes a year polyester staple and 35,000 tonnes acrylic plants.

Fibre del Tirso, at Otano in Sardinia, which is jointly owned by Montedison and ENI, is building a new 30,000 tonnes acrylic plant. Altogether total Italian acrylic capacity is expected to rise to 250,000 tonnes by 1980. In polyester the country's total capacity in staple and filament is due to climb from the 1975 *figure of 120,000 tonnes to* 190,000 tonnes by 1980, and in nylon, capacity is to rise from 155,000 to 200,000 tonnes over the same period.

The Italians justify their investment in fibres on the grounds that the industry in Europe as a whole could supply a greater proportion of European textile industry requirements. The Italians calculate that around 95 per cent. of the U.S. textile industry's requirements are met by domestic fibre producers whereas in Europe the figure is only around 80-85 per cent.

This evidently assumes, however, that the addition of further capacity and competition will improve rather than worsen the already weak financial position of European fibre producers. The producers in other European countries would almost certainly argue that competition from low-cost fibre originating outside the EEC, and not lack of availability of fibre from within the EEC, is the main reason for the degree of penetration of the EEC textile industry achieved by imports. The prospects for increased fibre exports outside Europe also seem slim, especially if existing imports are to be displaced.

The Italian fibre producers' ambitious plans nevertheless mean that in the period 1975-80 Europe will see a bigger expansion of fibre capacity that any other developed area. While the U.S. is planning a 22 per cent. increase, Taiwan a 32 per cent. increase and South Korea a 19 per cent. increase, with Japan proposing a standstill, Europe will be adding 37 per cent. new capacity of which Italian plans account for around two-thirds.

Whether or not this is to the liking of Italy's EEC partners, the consequence is likely to be a significant increase in the availability of Italian fibre in Europe at prices which may relate more to the necessity to maintain employment than to the need to make adequate returns. Much of the fibre is likely to be exported, with SIR planning a 50 per cent. export level, but considerable quantities are likely to find their way too into Italian mills to emerge *ultimately at competitively* priced fabrics and made-up goods. It is a prospect which is likely to please Italian textile machinery manufacturers more than Italy's textile rivals in Europe.

WALL STREET + OVERSEAS MARKETS + FOREIGN EXCHANGES

Early breakthrough 1,000 mark

BY OUR WALL STREET CORRESPONDENT

NEW YORK, Sept. 21.

AN UPWARD surge developed on Wall Street to-day, sending the Dow Jones Industrial Average decisively through the 1,000 mark barrier.

By 1 p.m. the Dow Jones Industrial Average moved ahead 12.14 to 1,006.65—the Average has not closed above 1,000 since July 14, when it reached 1003.32.

Closing prices and market reports were *not* available for this edition.

The NYSE All Common Index gained 30 cents to $57.24, while advances outpaced declines by more than a two-to-one margin. Trading volume expanded 3.66m. shares to 16.5m., compared with 1 p.m. yesterday.

The market's strength was attributed to optimism over the trend toward lower interest rates, and belief that the Federal Reserve is leaning in the direction of a more accomodative monetary policy.

At the opening of trading the Labor Department reported a 0.5 per cent. seasonally adjusted rise in Consumer Prices for August, or an annual rate of 6 per cent. The increase which matches the July rise was more than had been anticipated by analysts. But brokers say the Stock Market has not yet reacted to the news.

Many traders, however, were concerned about the week-old United Auto Workers Union strike against Ford Motor. They also are concerned about layoffs announced by Steel and other Industries because of a lack of demand.

General Motors rose $1¼ to $72¾ and Ford Motor $1 to $58½.

Heavily traded Polaroid added $1¼ at $44 and American Telephones $½ at $62½. Less active IBM moved up $2½ to $286¾. Allied Chemical $1¼ to $40¼, Kennecott Copper $1 to $32½, and Exxon also $1 to $56¼.

But Ingersoll Rand lost $1 to $70¾ on its expectation that 1976 *net income* will be below last year's $6.42 a share.

Elgin National gained $2¾ to $44 on a raised dividend and a three-for-one stock split.

Data General moved ahead $1¼ to $48—it introduced a new computer.

Eastman Kodak improved $1¼ to $93¾ and Du Pont $1¼ to $129¼.

Heavily traded Warner-Lambert shed $½ to $33½—its American Optical Corp. subsidiary has purchased rights to Union Corp.'s soft contact lens. Union Corp. rose $¾ to $8½.

United Telecommunications were active and up $¼ to $17¾ and Citicorp put on $¾ to $33¼.

Northwest Industries gave way $¼ after it purchased the BVD trademark from Rapid American, off $¼.

The American SE Market Value Index moved up 0.38 to 103.87.

MONDAY'S ACTIVE STOCKS

	Stocks traded	Closing price	Change on day
Sony	307,700	9⅞	+ ⅛
Texaco	270,700	25	− ⅛
Amer. Tel. Tel.	258,000	61¾	− ⅛
Atlantic Richfield	236,200	55	− 1¼
Kresge S.S.	223,000	40½	—
RCA	211,700	27¾	− ⅛
Westinghouse Elec.	200,600	18¼	− ¼
General Motors	197,000	70½	− ⅛
Polaroid	166,100	42	− 1
Exxon	156,200	55½	− ⅛

OTHER MARKETS

Canada higher

Canadian Stock Markets turned generally higher in moderate trading yesterday morning.

Golds, responding to firmer bullion prices, gained more than 8½ points on index. Dome Mines rose $1¼ to $37½.

Union Carbide Canada put on $¾ to $22¾ but Shell Canada shed $¾ to $15. Domtar eased $¼ to $22¾.

Royal Bank slipped $¾ to $29.

PARIS—Easier on lack of interest.

"*Oils and Chemicals lost ground.* Motors and Constructions were mixed, while Banks steadied.

In the Foreign sector, Americans were mixed, but Germans, International Oils and Golds gained strongly. Dutch shares, Canadians and Coppers were steady.

BRUSSELS — Narrowly mixed after active trading.

Steels were mostly easier except for Clabecq, up Frs.190 to 3,790. Non-Ferrous Metals were steady. Chemicals declined a little, Holdings were mixed, while Oils were little changed.

U.S. stocks closed narrowly irregular, Dutch and German shares improved, while the French sector was lower.

South African Golds firmed.

AMSTERDAM—Quiet but firm ahead of the 1977 Budget announcement.

Dutch Internationals all rose, although Hoogovens put on only Fs.0.20 after news of a pipe manufacturing subsidiary planning short-time working.

Ennia shed Fs.1 in Insurances. State Loans firmed.

GERMANY—Shares gained up to DM4 and generally finished around their day's highs on Foreign and Domestic Institutional buying.

The improved trend reflects both the firmer Bond Market and the calm in the Currency Markets.

Heaviest traded shares were Deutsche Bank, up DM3.50, Mannesmann, up DM3.20 and Siemens, up DM1.80.

BBC AG advanced DM4—it expects this year's earnings to be around those of last year.

Public Bonds firmed with the Regulating Authorities selling DM37m. nominal of stock. Foreign Mark Loans were well maintained.

SWITZERLAND — Generally slightly easier in very quiet dealings, as profit-taking set in after recent advances.

Swissair fell Frs.8 to 612 in Transports.

Leu and Bankgesellschaft were each slightly higher in otherwise barely steady Banks. Financials were little changed.

Motor-Columbus were resistant, despite its dividend cut.

Industrials were narrowly mixed.

Dollar stocks were narrowly firmer. Dutch Internationals very steady, while Germans were *slightly higher*.

COPENHAGEN—Mixed in moderate dealings.

MILAN—Most prices closed weak.

Insurance issues were especially affected by sales.

In the unofficial after Bourse, prices general firmed as support interventions continued.

OSLO—Industrials were irregular, while Bankings, Insurances and Shippings were quiet.

VIENNA—Narrowly mixed.

HONG KONG—Market drifted lower in dull, featureless trading.

Wheelock lost 5 cents to $HK2.425, despite its higher profit forecast, while China Engineers lost 30 cents to $HK11.20 after touching $HK11.60 on a net profit *for the last financial year following* a loss the previous year.

HK Bank gave way 30 cents to $HK19.40 and Jardines 20 cents to $HK19.40, while Swire Pacific at $HK10.20 and HK Land at $HK7.25, each lost 10 cents.

Hutchison eased 5 cents to $HK3.35.

TOKYO—Mainly higher, led by Sony up Y90 at 2,890, following its higher earnings.

Volume 180m. shares.

Other Electricals also closed higher, although initial gains were reduced, reflecting fears that the U.S. and Britain plan to curb Japanese colour TV imports.

Paper-Pulps advanced, as did Pharmaceuticals, Chemicals, Foods and Shippings.

Motors eased following the sharp decline in car output in August.

Constructions, Machineries, Textiles and Steels were slightly lower.

JOHANNESBURG—Gold shares rose sharply throughout the afternoon following higher London bullion indications.

"Heavyweights" gained between 50 cents and 100 cents. Some Financial Minings rose strongly.

Coppers and Platinums were moderately firmer.

AUSTRALIA—Generally lower on some selling pressure.

BHP fell 10 cents to $A7.70 ex rights and the Rights dropped 20 cents to $A3.45.

David Jones eased 4 cents to $A1.10, and TNT shed 5 cents to $A1.75 despite higher profits.

Toohey's rose 5 cents to $A1.30.

Pancontinental gave way 10 cents to $A11.30.

Western Titanium firmed 10 cents to $A3.10 and Poseidon picked up 2 cents to 82 cents.

North BH lost 5 cents to $A2.03 but Peko-Wallsend gained 6 cents to $A5.56.

Indices

NEW YORK—DOW JONES

	Sept. 20	Sept. 17	Sept. 16	Sept. 15	Sept. 14	Sept. 13	1976 High	1976 Low	Since compilation High	Since compilation Low
Industrial	994.51	995.10	987.95	979.81	978.64	985.29	1011.21 (12/7)	858.71 (2/1)	1051.70 (11/1/73)	41.22 (8/7/32)
Home Bonds	[illegible]									
Transport	[illegible]									
Utilities	[illegible]									
Trading vol. 000's	[illegible]									

N.Y.S.E. ALL COMMON

Sept. 20	Sept. 17	Sept. 16	Sept. 15	1976 High	1976 Low
56.74	56.66	56.21	56.67	56.74 (20/9/76)	57.66 (2/1/76)

Rises and Falls	Sept. 20
Issues Traded—1,908	Up—873
Down—581	Same—454
New Highs 168	New Lows 9

STANDARDS AND POORS

[illegible]

MONTREAL, TORONTO, JOHANNESBURG, and overseas indices (Australia, Belgium, Denmark, France, Germany, Holland, Hongkong, Italy, Japan, Singapore, Spain, Sweden, Switzerland): [illegible]

OVERSEAS SHARE INFORMATION

Investment premium based on $2.60 per £—117% (112%).

NEW YORK

[illegible]

CANADA

[illegible]

GERMANY ♦

Sept. 21	Price Dm.	+ or −	Div. %	Yld. %
A.E.G.	89.9	+0.6	—	
Allianz Versich.	398xr	...	18	2.2
B.M.W.	219.8	+3.8	18	4.1
B.A.S.F.	180	+1.7	14	4.4
Bayer	132	+1.6	14	[illegible]
Bayer Hypo	287	+2	20	3.4
Bayer Vereinsbk.	300	+2	20	2.8
Commerzbank	179.2	+1.4	18	[illegible]

MILAN

Sept. 21	Price Lire	+ or −	Div. Lire	Yld. %
Alitalia Priv.	684	+29	—	
ANIC	515	+4	—	
Ausonia Fin.	3,270	30	120	4.0
Bastogi	1,025	−34	—	
Breda	2,270	−35	165	6.7
Burgo	9,300	+50	—	
Cantoni	6,250	−131	—	
CIGA	1,850	−50		

PARIS / AMSTERDAM / BRUSSELS/LUXEMBOURG / SWITZERLAND / TOKYO / STOCKHOLM / COPENHAGEN / VIENNA / OSLO / SPAIN

[illegible]

AUSTRALIA

Sept. 21	Aust. $	+ or −
ACMIL	0.82	—
Acrow Australia	0.70	—
Adelaide Brighton Cent 50c	1.20	—
Allied Mntg.-Trdg. Indus. $1	1.62	—
Ampol Exploration	1.25	—
Ampol Petroleum	0.67	−0.02
Assoc. Minerals	3.50	—
Assoc. Pulp Paper $1	0.96	+0.01

JOHANNESBURG

MINES

Sept. 21	Rand	+ or −
Anglo American Corpn.	4.88	+
Charter Consolidated	2.68	+
East Driefontein	9.00	+
Elsburg	1.37	+
Harmony	4.50	+
Kinross	4.00	+
Kloof	5.60	+
Rustenburg Platinum	1.90	+
St. Helena	16.30	+

INDUSTRIALS

[illegible]

Pound steadier

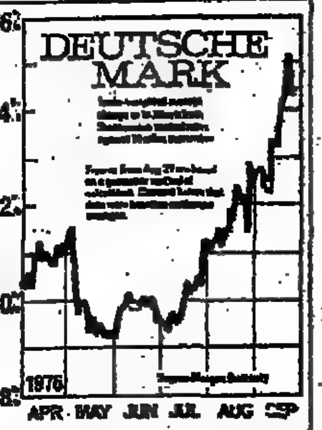
In comparatively quiet trading, sterling fell 60 points against the U.S. dollar to close at $1.7165-1.7175. Activity in the foreign exchange market yesterday took on a much less hectic look after Monday's sharp fall in sterling, although conditions remained nervous. Many dealers were awaiting the outcome of discussions *over the seamen's dispute.* The pound lost around 35 points quite quickly in the morning and steadied in the range of $1.7185-1.7210 for most of the day. Some late selling out of New York saw the rate down to $1.7150 at one stage, although in a thin market sterling soon recovered to its closing level.

Its trade weighted average depreciation, as calculated by the Bank of England, remained unchanged at 42.2 per cent., having stood at 42.1 per cent. at noon and 42.2 per cent. in early dealings. The Bank appeared to continue its current policy of allowing the pound to find its own level.

The West German mark gave a little ground following Monday's *denial by Herr Hans Apel,* the West German Finance Minister, over the possibility of any mark revaluation. However, there is still widespread speculation that some currency realignment may take place after the general election on October 3 and the mark retained a strong position closing at DM2.4775 from DM2.4700 against the dollar.

The U.S. dollar recorded mixed changes, possibly aided in places by some measure of overselling on Monday. The Morgan Guaranty calculation of the dollar's average depreciation, using noon rates in New York, showed a widening to 2.90 per cent. from 2.88 per cent.

Gold put on $4¼ an ounce to $119-120 following a large amount of short covering in an active day which saw some investment demand.



SPECIAL DRAWING RIGHTS RATES

One SDR is equal to	Sept. 20	Sept. 17
sterling	0.673368	0.666288
U.S. dollar	1.15595	1.15601
Belgian franc	44.0941	44.2651
Deutschemark	2.85418	2.86598
French franc	5.66565	5.65029
Italian lira	975.145	972.118
Japanese yen	332.339	331.558
Dutch guilder	3.00607	3.01487
Swedish krone	4.99340	5.00495
Swiss franc	2.85407	2.86008

Values are for currencies against the SDR as calculated by the International Monetary Fund in Washington.

EXCHANGE CROSS-RATES

Sept. 21	Frankfurt	New York	Paris	Brussels	London	A'sterdam	Zurich
Fr'nkfu't	—	2.4795-4810	50.35-50.50	6.506-521	4.270-285	95.52-47	100.10-20
N. York*	40.31-33	—	20.51-33	2.5225-45	1.7225-7235	38.40-42	40.45-55
Paris	198.325-725	4.9175-9275	—	12.9145-9390	8.454-479	189.10-60	198.325-725
Brussels	15.34-35	38.09-14	7.73-76	—	65.60-65.65	14.63-67	15.35-40
London	4.15-36	1.716-75	8.421-45	65.30-60	—	4.46-47	4.24-25
Am'rd'm	104.850-005	2.6012-37	52.225-875	6.82-85	4.4765-4815	—	104.90-95
Zurich	99.91-100.0	2.475-498	50.41-46	6.491-504	4.24-25	95.14-23	—

U.S. $ in Montreal U.S. $=97.25-30 Canadian cents.
Canadian $ in New York. C $=102.77-80 U.S. cents. U.S. $ in Milan 843.90-844.16.
Sterling in Milan 1451.20-50 * Rates for Sept. 20.

EURO-CURRENCY INTEREST RATES*

Sept. 21 1976	Sterling	U.S. Dollar	Canadian Dollar	Dutch Guilder	W. German mark	Swiss franc
†Short term	12½-13	5-5⅛	8¼-8½	10-12	4¼-4½	¼-½
7 days notice	13½-14	5⅛-5⅜	8⅛-8⅜	10-12	4¼-4½	⅜-⅞
Month	13¾-14¼	5¼-5½	8⅞-9⅛	13-14	4⅜-4⅝	1⅜-1⅞
Three months	14¾-15¼	5⅜-5⅝	9⅛-9⅜	12½-13½	4⅜-4⅝	1⅜-1⅞
Six months	15⅜-15⅞	5⅞-6⅛	9⅜-9⅝	10½-11½	4⅝-5⅛	2⅛-2⅜
One year	15⅛-15⅝	6¼-6½	9⅜-9⅝	9-10	5⅜-5⅝	2⅛-2⅝

Euro-French deposit rates: two-day 9¼-9¾ per cent.; seven-day 9¼-9¾ per cent.; one-month 10-10½ per cent.; three-month 10¼-10¾ per cent.; six-month 11¼-11¾ per cent.; one year 11½-11¾ per cent.

Longer-term Eurodollar deposits: two years 7¼-7½ per cent.; three years 7⅝-7⅞ per cent.; four years 8-8¼ per cent.; five years 8⅛-8⅜ per cent.

The following nominal rates were quoted for London dollar certificates on deposit: one-month 5¼-5⅜ per cent.; three-month 5⅜-5½ per cent.; six-month 5⅝-5¾ per cent.; one year 6⅛-6¼ per cent.

*Rates are nominal closing rates.

†Short-term rates are call for sterling, U.S. dollars and Canadian dollars two days' notice for guilders and Swiss francs.

**Rates unavailable due to market fluctuations.

GOLD MARKET

	Sept. 21	Sept. 20
Gold Bullion (a fine ounce)		
Close	$119-120	$114¾-115¾
Opening	$118½-119½	$114½-115½
Morning fixing	$118.60 (£68.990)	$115.10 (£66.958)
Afternoon fixing	$119.9 (£69.709)	$115.40 (£67.180)
Gold Coins domestically		
Krugerrand	$122-124 (£71-72)	$118-120 (£68½-69½)
New Sov'reigns	$41½-43½ (£24½-25½)	$40½-42½ (£23½-24½)
Old Sov'reigns	$39-41 (£22½-23½)	$37-39 (£21½-22½)
Gold Coins (intern'nally)		
Krugerrand	$123-125 (£72-73)	$118-120 (£68½-69½)
New Sov'rgns	$42-44 (£24½-25½)	$41-43 (£24-25)
Old Sov'rgns	$37-39 (£21½-22½)	$36-38 (£21-22)
$20 Eagles	$164-167	$164-167
$10 Eagles	$96-99	$96-99
$5 Eagles	$63-66	$63-66

FOREIGN EXCHANGES

Sept. 21 1976	Bank Rate %	Day's Spread	Close
New York	5¼	1.7150-1.7225	1.7165-1.7175
Montreal	9½	1.6675-1.6750	[illegible]
Amsterdam	7	4.46-4.49	[illegible]
Brussels	8	66.25-66.61	[illegible]
Copenhagen	8½	10.23-10.28	[illegible]
Frankfurt	3½	4.24-4.28	[illegible]
Lisbon	6½	53.30-53.70	[illegible]
Madrid	7	116.25-118.00	[illegible]
Milan	12	1,447-1,452	[illegible]
Oslo	6	9.32-9.38	[illegible]
Paris	9½	8.42-8.46	[illegible]
Stockholm	6	7.42-7.46	[illegible]
Tokyo	6½	492-502	[illegible]
Vienna	4	30.10-30.45	[illegible]
Zurich	2	4.24-4.27	[illegible]

*Basic discount. †Rates given for convertible franc; financial franc 87.35-87.75.

OTHER MARKETS

[illegible]

*Basic discount. †Given rates are dealers. ♦Rate given is Official BCRA rate 428.04-428.08.

FORWARD RATES

	One month	Three months
New York	1.40-1.30 c. pm	3.87-3.77 c. pm
Montreal	0.75-0.65 c. pm	2.10-2.00 c. pm
Amst'dam	½ c. pm-½ c. dis	1 pm-par
Brussels	10-30 c. dis	30-50 c. dis
Cop'nhg'n	4-6 ore dis	5-7 ore dis
Frankfurt	4-3 pf. pm	10¼-9¼ pf. pm
Lisbon	10 c. pm-40 c. dis	20-1.0 c. dis
Madrid	250-350 c. dis	600-700 c. dis
Milan	4-10 lire dis	28-38 lire dis
Oslo	3-1 ore pm	6-5 ore pm
Paris	3¼-2½ c. pm	8-7 c. pm
Stock'lm	3¼-5¼ ore dis	[illegible]
Vienna	37-27 gro pm	88-78 gro pm
Zurich	3-4 c. pm	15¼-12¼ c. pm

Six-month forward U.S. dollar 7.32-7.22c prem. and 12-month 13.35-13.25c prem.

FARMING AND RAW MATERIALS

Recovery in cocoa prices

BY Richard Mooney

PRICES recovered yesterday with futures achieving a £30 permissible rise in mid-afternoon. Prices fell back later and at the close the December position on the London terminal market was quoted at £1,466.25 a tonne, up £17.75 on the day.

The market opened slightly higher in line with the overnight rise in New York, but heavy buying, mainly from a single source, pushed up prices. The buying was thought to represent trading on behalf of U.K., Eastern Bloc and possibly Russian consumers. Dealers were uncertain on the reasons for the decline in late afternoon, but suggested it may have reflected pent-up selling pressure. At the close, however, values were steadied by covering purchases against earlier short sales.

The publication by French merchant M. Louis Touton of a West African 1976/77 crop estimate had little impact on prices. This may have been due to the confusion over the implications of the report which, on the one hand, was more optimistic on crop levels than last year's Gill and Duffus estimate for the leading producing countries but, on the other, argued that prices would have to rise steeply to bring consumption into line with world production.

Below-average British sugar crop forecast

BY PETER BULLEN

BRITISH SUGAR'S long-awaited estimate of the size of Britain's sugar beet harvest was published yesterday. It put the white sugar production figure at between 700,000 and 800,000 tonnes.

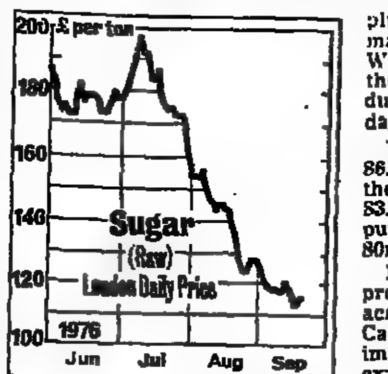
The figures did not excite the market, which had been forecasting a final production figure of around 700,000 tonnes.

However, the mood of the market was much firmer yesterday though traders could find no specific reasons for the stronger sentiment. The London daily price for raw sugar was raised by £2 to £115 a ton and on the terminal market the December position closed £8.925 up at £13? S75 a ton.

Although the British Sugar Corporation's estimate indicates a better harvest than last year's 640,000 tonnes and the previous year's exceptionally low 568,000 tonnes it will be well below average. With the industry wedded to plans for expanding home output and with the acreage planted up by five per cent. this year, there was every indication that a bumper crop of over 1m. tonnes of sugar would be produced.

The months of drought, record high temperatures and pest attacks combined to bring a drastic reduction in expectations. The wetter weather of late has helped to increase beet weight, but the extra growth of the root and foliage is likely to have sapped the sugar content slightly.

Mr. Peter Dyke, BSC's chief agriculturist said they had had to bracket the estimate between 700,000 and 800,000 tonnes as even with several weeks root



sampling completed it would have been guesswork to have given a more precise figure. The drought had caused inconsistent growing patterns and the recent rains, while doing nothing but good, had produced further variations.

Provisionally BSC has fixed the opening dates for its 17 beet processing factories. The first seven should start operating next week followed by the others during October. Newark will not open this year to enable the £20m. reconstruction to increase its capacity almost four-fold to continue uninterrupted.

A 1976-77 world raw sugar surplus of 4.4m. tonnes was estimated by London sugar dealers Woodhouse, Drake and Carey in their first estimate of world production and consumption yesterday.

World production was put at 86.4m. tonnes raw compared with the first estimate for 1975-76 of 83.4m. tonnes. Consumption was put at 82.01m. tonnes, against 80m. tonnes last year.

Drought had reduced EEC production despite increased acreages, but with African Caribbean and Pacific producer imports, the EEC will be a net exporter on a smaller scale than before, they said.

As a result of the poor EEC production, it was foreseeable that the EEC Commission would encourage increased plantings again next year. With good weather, the EEC could rank among the leading world sugar exporters in 1977-78, they added.

U.S. Bill defeat boosts metals

BY OUR COMMODITIES STAFF

THE OVERNIGHT news that the U.S. House of Representatives had rejected the Bill authorising the Administration to sell off quantities of tin, silver, diamonds and antimony from Government stockpiles boosted London metal prices yesterday.

Silver prices particularly responded with lively gains that took the spot bullion price to 252.3p an ounce, up 5.75p, while the spot price on the London Metal Exchange closed 9.75p higher at 253p an ounce.

In the tin ring a drop in the Penang price was ignored and values soared to a peak £4,795 for three months standard tin. At this level profit-taking set in and prices eased and forward metal closed £65.5 up at £4,764.5 a tonne and cash tin £65 up at £4,642.5.

The lead and zinc markets were quieter, but both gained slightly in line with sentiment in tin and silver. Copper prices were more buoyant, however, and cash wirebars finished the day just below the peaks reached at £831.5 a tonne, £6 higher on balance.

In Washington the House of Representatives voted 204 to 180 to reject the legislation the Administration had sought which would have authorised the disposal of 118m. ounces of silver, 28,000 long tons of tin, 10,000 short tons of antimony and 8.5m. karats of industrial diamonds.

Late last night, Reuter reported that Congressional leaders were trying to revive the rejected legislation.

A spokesman said that Mr. Charles Bennett (Dem, Fla), house sponsor of the Bill, would attempt a different parliamentary route.

The spokesman said that Mr. Bennett yesterday morning wrote to chairman Ray Madden, of the House Rules Committee, asking for the Bill to be rescheduled.

Although such a request is unusual, the approach to Mr. Madden could be successful, the spokesman said, because the House leadership wants to see a Bill passed. But he said that even if it goes to the floor again, it may be difficult to reverse the original vote.

A Bill taken up under suspension requires a two-thirds vote for passage. The Stockpile Bill, however, did not achieve the simple majority.

Further efforts were indicated in the Senate, too, where a similar disposal Bill is held up in the Armed Services Committee.

The committee could take up the matter to-morrow, said a staff member.

Earlier, Reuter reported from New York that Mr. Joseph Zimmerman, vice president of Miles Metal Corporation, had forecast that copper was unlikely to reach 80 cents a lb until sometime next year, barring renewed inflation, a new international monetary crisis or disruption of copper output in producing countries.

He said he also doubted that copper would touch $1.25 or even $1 next year, despite optimistic forecasts by speculators.

American options trading plan

CHICAGO, Sept. 21.

COMMODITY FUTURES Trading Commission chairman, Mr Bagley, said the Commission hopes to present before the end of 1976 a three-year pilot programme for commodity options trading which could include foreign business.

He told the North American Securities Administrators' Association here that the problem of foreign options will be "a tough one." But, provided they are traded on recognised exchanges, with clearing house facilities, and meet the standards set for U.S. domestic commodity option trading, the Commission could allow sales from those exchanges, he said.

The pilot programme might include about four commodities, Mr Bagley said. Coffee, cocoa, and metals are under consideration.

U.K. fish limits stand welcomed

MR. ANTHONY CROSLAND'S "go it alone" warning on fishing limits was welcomed as "a shot across the bows of the EEC" by the British Fishing Federation in Hull yesterday.

"It means that the Common Market countries have really got to get a move on and settle the fishing limits issue definitely within the next 12 weeks," said a spokesman.

The present fishing agreement with Iceland expires on December 1 and Mr. Crosland warned that Britain might go it alone and extend her limits to 200 miles from January 1 if agreement among The Nine proved impossible. Draft legislation has been prepared by the Government.

The BFF represents companies owning 400 vessels at the nine major deep-sea fishing ports in England, Scotland and Wales.

Mr. Crosland is campaigning for a total reconsideration of the EEC fisheries policy, drawn up in 1970. British fishermen have partial protection up to 1982, but the industry fears a fishing free-for-all after that date, as Common Market trawlers will, in theory, be able to scoop up the coastal shoals maintained through Britain's strict protection policies.

The Government wants a two-tier protection system—50 miles for Common Market trawlers and 200 miles for other nations.

Marked fall in Britain's grain stocks

UNSOLD or unused cereal stocks on British farms at end-July fell to 120,000 tonnes against 350,000 a year earlier, Ministry of Agriculture statistics showed yesterday.

The total includes 90,000 tonnes of barley (190,000 tonnes at end July 1975), 10,000 wheat (120,000) and 20,000 oats (40,000). Unsold stocks at end June totalled 270,000 tonnes against 820,000 last year.

From Pretoria, meanwhile, Reuter reports the first estimate of South Africa's 1976-77 wheat crop is 2,015,000 tonnes compared with last season's production of 1,792,000 tonnes.

And in Rome, the Italian 1976 barley crop is estimated to rise to 762,200 tonnes from 647,500 tonnes from a bigger planted area of 278,166 hectares (248,730 in 1975), provisional figures from the Central Institute of Statistics show.

SWISS AGRICULTURE

Output boom despite farmers' exodus

BY JOHN WICKS IN ZURICH

OVER THE past 20 years there has been a remarkable decline in the number of farms and farmers in Switzerland. According to a recent Government report, the number of farms and smallholdings dropped from 205,997 in 1955 to only 133,123 as of June 30, 1975, with the total for those farmed on a full-time basis falling even faster from 148,602 to 76,677. Even more rapid has been the decrease—a fall of more than half—in the number of full-time male farm workers from nearly 275,000 to little more than 130,000. With a share of rather over 6 per cent. primary-sector employees in the country's working population, Switzerland is, for all its scenery, one of Europe's least "agricultural" nations.

This does not mean that Swiss agriculture is unimportant or considered so by the Swiss. It is to-day a £1.4bn. industry on which extensive areas of the country depend and which keeps Switzerland 60 per cent. self-sufficient in produce. A relic from the war years is the sometimes near-traumatic fear of having to rely on the outside world for food supplies. Apart from making the authorities very much aware of the need for strategic produce reserves, this has led to many policies towards farmers which are widely considered by the majority of townsfolk to smack of feather-bedding. Farming has come in for less kind treatment from the Government since the recent deterioration in the public finance situation, but remains a special case—particularly in the light of the disproportionate strength of the rural community in Parliament.

Income

The shrinking number of farms and farm personnel has by no means led to a drop in production. Although a good many sectors of agriculture saw a drop in output last year—actual farm income slipped by 0.9 per cent. over 1974 to Sw.Frs.6.2bn.—most major items of produce have shown a marked upward trend since the mid-fifties. This has been particularly noticeable in the case of cattle and pig farming and dairy produce, as well as the maize and barley crops. The reason lies in a substantial improvement in productivity.

Economic Minister Ernst Brugger said in June that this has more than tripled since the war. The sharp improvement in yield has resulted from the disappearance from the scene of a large number of smaller or less profitable farms. Either the farmer himself gave up or his heir was not prepared to keep the business going. In many cases, farm land was sold—often at astonishing prices—to developers. Acreage per farm grew as neighbours took over land and both this and the high Swiss wages led to widespread mechanisation. Despite the large-scale exodus from farming, agricultural acreage in use has declined by only some 5 per cent. and overall output has risen considerably.

One-man farm

At the same time, however, there has been a development in the other direction, with a large number of small undertakings cutting to part-time operation. To-day, some 42 per cent. of all farms and smallholdings are run on this basis and in many areas the one-man farm is the rule. While the average acreage is to-day of some 10 hectares (about 25 acres), tiny smallholdings of under 3 hectares are still common in mountain areas like the Valais or the Ticino. Many of these are so marginal and yield such a poor living that there are special "mountain-farmer" collections and rural communities are often adopted by townsfolk and sent financial aid. The Government, too, gives a helping hand here, both for regional-policy reasons and to save a loss of cultivated land or pasture.

The future would seem to belong to the more sophisticated farmer, though. Mr. Brugger claims that as farming standards are rising the farmer is becoming a businessman. In the case of the smallholder, co-operation with his neighbours, again to quote Mr. Brugger, is a necessity.

Whatever the case, Swiss farming is looking forward to expansion. A working party made up of representatives of farmers' and growers' associations, agricultural institutes and Government last year published a guideline programme for agricultural production by 1980. This recommends as basic aims an extension of arable acreage between 1975 and 1980 of some 35,000 hectares to 200,000 hectares, promotion of the national fodder crops and a stabilisation of the total cow population at about 900,000 head.

Arable acreage has increased in specific areas with the help of a Government promotion programme, with the total area of 262,291 hectares in mid-1975 above that of 259,820 recorded 20 years earlier. Since 1965 feed-cereal acreage has increased 71 per cent. to 81,659 hectares, more than making up for the loss of 24 per cent. of the bread-cereal area which in mid-1975 amounted to 96,078 hectares. By 1980, the experts reckon with a further rise in feed cereal acreage to what could be 100,000 hectares and a new increase in that for bread cereals to 113,000 hectares.

For the cattle farmers—and cows remain the centre of Swiss agriculture—development is unlikely to be particularly marked in the near future. Domestic consumption of dairy products is showing no marked improvement as a whole, despite rising sales of up-market products like yoghourt or cream, and Switzerland's traditional cheese exports have suffered from the very high Swiss-franc exchange rate. Beef and veal consumption has suffered from the high domestic prices—claimed by some to be the highest in the world—and a move away to pork and poultry. In the two latter sectors, demand for pork is now expected to rise only slowly and that for eggs hardly at all: poultry consumption could show a moderate further increase, however.

Meagre year

Special conditions apply for Swiss vineyards. Acreage has been kept almost unaltered since as long ago as 1930 and it is virtually impossible, and has been for years to obtain permission to lay down a new vineyard. In recent years the market has suffered from much cheaper wines offered—in the face of protective measures for Swiss growers—by such neighbouring countries as Italy, France and Spain. The farmers' working party admits that there are hardly any chances for a rise in demand, but want to aim for a continuation of a one-third market share for indigenous wines in total Swiss consumption.

For Swiss farming as a whole, initial indications are that 1976 will have been a rather meagre year. The drought, even though it was less deleterious than in many other European countries, was responsible for losses of "several millions" of francs.

COMMODITY MARKET REPORTS AND PRICES

BASE METALS

COPPER—Firmer on the London Metal Exchange after receiving an initial fillip from the advance of tin and silver following the House of Representatives rejection of a Bill to authorise U.S. stockpile sales. Forward metal opened at £8?? and climbed to £865, before being pegged back by back pricing and profit-taking sales. In the rings the price held around £865 on fairly good buying and held at that level during the afternoon, aided by a steady Comex opening. In late trading there was a tendency to drift and the price closed on the Kerb at £864. Turnover 11,525 tonnes.

Amalgamated Metal Trading reported that in the morning cash wirebars traded at £831.5, three months £864, 66, 65, 64, 66, 65.5, 63, 64, 64.5. Cathodes, cash £818, 17. Kerb: Three months £864, 63.5, 63. Afternoon: Wirebars, cash £832, three months £865, 64, 66, 68, 65.5, 65, 64.5, 64, 64.5. Three months £851.5, 52. Kerb: Three months £864.5, 4, 3.5, 4.

COPPER	a.m. Official	+ or −	p.m. Unofficial	+ or −
	£	£	£	£
Wirebars				
Cash	831.5	+0.5	831-2	+6
3 months	864-5	+.25	864-5	+6.25
Settlem't	831.5	+.5	-	......
Cathodes				
Cash	817-.5	−2	818.5-20	+5.25
3 months	850.5	−2.25	851.5-2	+6.25
Settlem't	817.5	−2	-	......
U.S. Prod.	...	......	*74	......

TIN—Higher after the news that there would be no U.S. stockpile sales. Forward metal quickly advanced to £4,795 from an opening of £4,740, but attracted profit-taking and hedge selling at the higher level. This pushed the price down to where it started, but later it was steadier in line with other metals and closed on the Kerb at £4,770. Turnover 1,610 tonnes.

TIN	a.m. Official	+ or −	p.m. Unofficial	+ or −
High Grade	£	£	£	£
Cash	4635-45	+17.5	4640-5	+65
3 months	4745-55	+2.5	4764.5	+65.5
Settlem't	4645	+20	-	......
Standard				
Cash	4620-5	+17.5	4640-5	+65
3 months	4745-50	+2.5	4764-5	+65.5
Settlem't	4630	+20	-	......
Straits E.	[illegible]			
New York	-	......	363.50	+2.5

. Gold 01-351 3466 December Silver 259.2-262.0

LEAD

[illegible]

ZINC

[illegible]

SILVER

[illegible]

COCOA

[illegible]

FREIGHTS

DRY CARGO—Chartering on reduced scale with very little interest in grain [illegible]

COFFEE

[illegible]

RUBBER

[illegible]

SOYABEAN MEAL

[illegible]

GRAINS

THE BALTIC—[illegible]

Oxon. £80.70, N.E. England £79.40. Feed barley: Berks. and Oxon. £79.85.

LONDON GRAIN FUTURES MARKET (GAFTA)—Wheat, very steady. Closing: Sept. 80.75, Nov. 82.20, Jan. 84.25, March 86.30, May 88.65. Business: Sept. 80.50, Nov. 82.10-81.05, Jan. 84.25-83.30, March 86.50-85.45, May 88.65-87.90. Sales: 2??.

Barley, very steady. Closing: Sept. 78.10, Nov. 79.90, Jan. 82.45, March 84.50, May 86.65. [illegible]

SUGAR

LONDON DAILY PRICE (raw sugar) [illegible]

WOOL FUTURES

[illegible]

MEAT/VEGETABLES

[illegible]

—Imported produce: Oranges—S. African: 56/150 3.35-4.05; Californian: 3.60 to 4.30. Grapefruit—S. African: 27 2.70, 32 3.00, 36 2.70, 40 2.80, 48 2.90, 56 3.00, 64 2.50, 72/88 2.00; Dominican: 3.20-3.30. Lemons—S. African: 60/195 5.00-6.25; Italian: 5.00; Spanish: 4.00. Apples—New Zealand: Dougherty 3.50; Tasmanian: Crofton 3.30, Sturmer Pippin 3.10; French: Golden Delicious, new crop 1.70-1.90, Stark [illegible]

JUTE

DUNDEE—Firmer. Prices c and f U.K. [illegible]

CALCUTTA—Steady. Indian Spot Rs.455. [illegible] A bale of 400 lb.

COTTON, Liverpool—Spot and shipment sales amounted to 8 tonnes bringing the total for the week so far to 164 tonnes. A meagre offtake followed diminished demand as customers were slow to anticipate needs. Attention was mainly centred on African and Middle Eastern qualities, F. W. Tattersall reports.

COPRA, Philippines—Oct.-Dec. $340 reseller a tonne, cif North European ports.

GRIMSBY FISH—Supply good, demand good. Prices at ships side (unprocessed per stone): Shelf cod £3.40-£4.80, codlings £2.00-£3.00; shelf haddock large £3.00-£3.40, medium £2.50-£3.30, Small £1.30-£2.00; large plaice £4.00-£4.50, medium £3.50-£4.50, best small £3.00-£3.50; Skinned dogfish medium £4.00, large £4.50; lemon soles £5.50-£6.00, rock fish £1.60-£2.30; reds £1.60-£2.10; saithe 1.50-£1.70.

U.S. SEALSKIN IMPORT RULE

WASHINGTON, Sept. 21.

THE U.S. Government has announced that importers will be permitted to bring in about 19,000 cape fur sealskins from the 1976 harvest in the Republic of South Africa reports A.P-Dow Jones.

The permission was granted through a waiver of provisions in the Marine Protection Act barring such importation unless the animals are killed in accordance with conditions acceptable to the U.S. Government.

The Commerce Department's national marine fisheries service said the waiver contains several stipulations including a limit on the number of seals harvested from the South African herds and the use of humane methods in killing.

PRICE CHANGES

Prices per ton unless otherwise stated.

	Sept. 21 1976	+ or −	Month ago
Metals			
Aluminium (a)	£579	......	£526.5
Free Market (cif)	$945-970	+5.0	$975-985
Copper			
Cash Wire Bars (w)	£831.5	+6.0	£860.5
3 months do. do. (w)	£864.5	+6.25	£890.5
Cash Cathode (w)	£819.25	+5.25	£848.5
3 months do. do. (w)	£851.75	+6.25	£878.5
Gold ...Troy oz.	$119.5	+4.25	$104.875
Lead Cash (w)	£277.25	+1.625	£274.25
3 months (w)	£288.25	+1.375	285.125
Nickel (w)	£2,795.5	......	278.5
Free Market (cif)(lb)	$2.05-2.20	......	$205
Platinum (troy oz)	£105	......	£104.004
Free Market	£92.3	+1.05	86.7
Quicksilver (76lb)	$90-95	+3.0	88-95
Silver Troy oz.	252.3p	+5.75	238.05p
3 months	260.8p	+5.15	245.25p
Tin Cash (w)	£4,642.5	+65.0	£4,425.5
3 months (w)	£4,764.5	+65.5	£4,570
Wolfram 22.04lb.cif	$74-75	......	$70-72
Zinc Cash (w)	£407.75	+1.5	£417.75
3 months (w)	£424.75	+1.5	434
Producers (m)	$795	......	$795
Oils			
Coconut Malayan	‡	......	‡
Groundnut			
‡	£476	+5.0	£427
Linseed Crude (w)	£456	......	£458
Palm Malayan (w)	‡	......	$440
Soyabean (w)	‡	......	‡
Seeds			
Copra Philipp (w)	$340	−2.5	$330
Gr'nuts Nigerian	†	......	‡
Linseed Can. No. 1	£200	−0.5	£195
Grains			
Barley EEC	‡	......	£78.5
Home Futures	£78.1	+0.15	£76.2
Maize			
French No.3 Am.	£90.75	......	£78.5
S.A. Yellow	‡	......	‡
Wheat			
No. 1 Red Spring	£87.6	+1.0	‡
No. 2 Hard Winter	£83.45	......	£82.7
Australian (f.a.q.)	‡	......	‡
English Milling (w)	£96.25	......	£83.5
Cocoa shipment (a)	£1,466.5	......	£1,583
Futures Dec	£1,466.25	+17.75	£1,553.5
Coffee shipment (a)	‡	......	‡
Futures Nov	£1,900.5	+11.5	£1,634.5
Cotton 'A' Index			
cent	82.95	−0.1	86.8*
Jute LJ ABWC (d)	$581	......	$380
Rubber kilo	48p	−0.5	46.5p
Sisal EASL (w)	$600	......	$600
Sugar (Raw)	£115	+2.0	£123
Woo'tops 64s ...kilo	283p	......	276p
Cloves (Madagascar)	$3,250	......	$3,250
Pepper White ...ton	£1,255	+10.0	£1,109
Black ...ton	£1,050	......	£955

* Nominal. † Seller. ‡ Unquoted. § Unofficial close. ♣ Indicative price. a Seller's quotation. b U.K. and Commonwealth refined. c Uganda Robusta standard grade indicative prices f.o.b. Mombasa U.S. cents a pound. d Bangladesh white "C" h Jan.-March. k Oct.-Dec. r Sept. w Metric tons.

FINANCIAL TIMES

Sept. 21	Sept. 20	Month ago	Year ago
234.31	234.20	255.29	178.04

(Base: July 1, 1952=100)

REUTER'S

Sept. 21	Sept. 20	Month ago	Year ago
1464.4	1465.0	1478.9	1165.8

(Base: September 18, 1931=100)

DOW JONES

Dow Jones	Sept. 21	Sept. 20	Month ago	Year ago
Spot	332.85	333.91	336.66	313.36
Futures	332.98	331.85	338.91	297.59

(Average 1924-25-26=100)

MOODY'S

Moody's	Sept. 21	Sept. 20	Month ago	Year ago
Spale Commo'ty	815.8	828.2	816.8	871.0

(December 31 1931=100)

VEGETABLE OILS

LONDON PALM OIL—After quiet and slightly easier opening, market steadied following renewed consumer buying interest in the physical oil sector, reports Faure Fairclough. Closing: Oct. 275-262, Dec. 269-265½, Feb. 268½-267½, April 271-269, June 271½-270½, Aug. 274-272, Oct. 278-277½. Sales, 3 lots.

U.S. Markets

Cocoa weak after early rise

NEW YORK, Sept. 21.

SILVER closed higher on local and Commission House buying following rejection by U.S. House of Representatives to approve sales of Government stockpiles. After initial strength, cocoa gave back most of its gains on Commission House liquidation. Sugar closed lower on trade selling electing Commission House stops on reports of possible increase of duty on imports. Bache reports.

Cocoa—Ghana spot 124 (122½). Bahia spot 116 (115½). Sept. 113.90 (112.00), Dec. 107.90 (106.40), March 105.10, May 99.20, July 95.35, Sept. 91.45 nom., Dec. 88.93. Sales: 1,107.

Coffee—"C" Contract: Sept. 163.50 asked (164.50). Dec. 151.00-151.50 (150.00), March 145.40-145.00, May 143.40-142.90, July 142.00, Sept. 141.40, Dec. 140.50 asked. Sales: 616.

Copper—Sept. 64.60 (64.20), Oct. 64.70 (64.40), Nov. 65.20, Dec. 65.70, Jan. 66.20, March 67.30, May 68.40, July 69.40, Sept. 70.40. Sales: 2,309.

Cotton—No. 2: Oct. 72.70-73.00 (73.35), Dec. 73.70-73.90 (73.95), March 74.70-74.90, May 75.50, July 74.60-74.70, Oct. 69.35-69.45, Dec. 66.30-66.45, March 65.85-66.10. Sales: 3,250.

♣Gold—Sept. 119.00 (114.70), Oct. 119.00 (114.60), Nov. 119.00, Dec. 119.10, Feb. 119.40, April 119.90, June 120.60, Aug. 121.40, Oct. 122.20, Dec. 123.00. Sales: 2,242.

Greasewool—Spot 150.00 nom. (same), Oct. 175.0-181.0 (171.0), Dec. 175.0-182.0 (175.0), March 175.0-186.0, May unquoted.

†Lard—Chicago loose 18.50 (19.00 nom.), NY prime steam 20.00 traded (20.50).

††Maize—Sept. 260-261 (258½), Dec. 260½-261 (263), March 268½-268¼, May 272¼, July 294½-294¾, Sept. 255½.

‡Platinum—Oct. 159.10 (156.10), Jan. 162.10 (158.50), April 164.90, July 167.90-168.10, Oct. 171.40, Jan. 174.00. Sales: 384.

‡‡Silver—Spot 434.30 (420.00), Sept. 434.00 (420.80), Oct. 434.40 (421.00), Nov. 436.30, Dec. 438.00, Jan. 439.50, March 443.30, May 447.70, July 451.90, Sept. 456.30, Dec. 462.90, Jan. 466.50. Sales: 16,668.

Soyabeans—Sept. 653 (647½), Nov. 638-[illegible]

[illegible]

STOCK EXCHANGE REPORT

Gilts good and technical rally in equities continues

Share index up 6.1 more at 345.8—Gold shares good

Account Dealing Dates

Option *First Dealings	Declarations	Last Dealings	Account Day
Sep. 6	Sep. 16	Sep. 17	Sep. 28
Sep. 20	Sep. 30	Oct. 1	Oct. 12
Oct. 4	Oct. 14	Oct. 15	Oct. 26

* "New time" dealings may take place from 9.30 a.m. two business days earlier.

With Monday's "after-hours" announcement of a new long "tap" stock removing one of the major uncertainties, stock markets put on another good performance yesterday. Underlying sentiment was also helped by growing optimism about the outcome of the seamen's pay negotiations.

After overnight consideration of the terms of the new tap stock, British Funds encountered a useful business: long-dated stocks closed with gains ranging to ⅜ and short-dated issues were up to 3/16 better. The Government Securities index closed 0.26 higher at 59.87, its biggest one-day rise for nearly seven weeks.

Once again, the improvement in *equities was largely technical*. Nevertheless, gains generally ranged to 8 and sometimes more which left the FT 30-share index with a further rise of 6.1 at the close of 345.8, making a two-day gain of 11.3. Elsewhere, Rhodesian Issues continued to claim a fair amount of interest on constitutional setlement hopes, although Rhodesian bonds failed to make *any further headway*.

Secondary issues made a fairly general all-round improvement; rises led falls by 5-1 in FT-quoted Industrials and the FT-Actuaries All-Share index gained 2.1 per cent. to 142.67.

Helped by hopes of a Rhodesian settlement and a rise of $4.25 to $119.50 per ounce in the price of bullion, Gold Mining issues encountered *a good general* demand. The Gold Mines index closed 10.6 higher at 122.4, its largest one-day rise since July 21 last.

Funds fare well

Views that, come Friday, the terms of the new long "tap" stock, Treasury 14½ per cent., 1994, could look attractive overrode the effects of a lower rate for sterling, boosting longer-dated British Funds as much as ⅝. Morning business in this sector was particularly brisk, being given an added fillip by selective switching between stocks. A few high-coupon issues closed below the best, this possibly reflecting a move to acquire funds for applications for the new "tap." The shorts tended to be a little overshadowed, but a small demand coupled with bear-closing brought gains extending to 3/16; the "tap" Treasury 9¾ per cent., 1981, improved ⅛ to 89½, a level at which it was thought the Government broker might reactivate the stock.

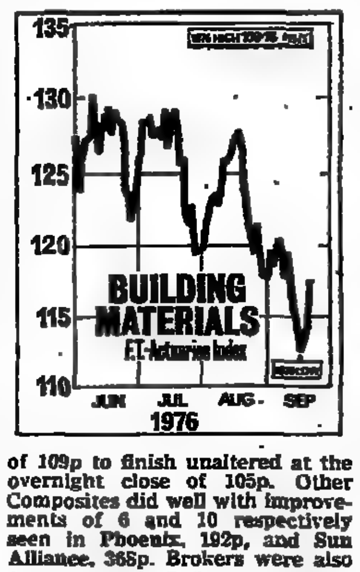
Southern Rhodesian bonds held at Monday's enhanced prices despite a marked *reduction in* interest.

The attractions of U.S. stock investment initiated revived institutional demand for investment currency which impinged on a short supply situation in a market already influenced by the continued downtrend in sterling. As a result, the premium jumped 4½ points to 117 per cent. Yesterday's SE conversion factor was 0.7014 (0.7109).

Bk. Scotland below best

The big four Banks took Monday's technical rally a useful stage further yesterday. Barclays fared best at 247p, up 9. Supported up to 250p in front of the interim figures, Bank of Scotland eased back on the first-half profits which *were in line with market expectations* to close a net 3 better at 243p. Rhodesian settlement hopes continued to spur Standard Chartered, which added 9 more to 326p. The firmer trend in gilts helped Discounts venture forward and gains of 10 were seen in Alexanders, 175p, Allen Harvey and Ross, 340p, and Union, 283p.

Mild disappointment with the interim figures brought about a reversal in Eagle Star, which eased from an earlier firm level of 109p to finish unaltered at the overnight close of 105p. Other Composites did well with improvements of 6 and 10 respectively seen in Phoenix, 192p, and Sun Alliance, 368p. Brokers were also favoured with C. E. Heath 10 up at 376p. C. T. Bowring hardened 3 to 69p ahead of to-morrow's interim results.



Quietly firm conditions prevailed in the drinks' sector. Distillers advanced 3 to 122p and Bass Charrington and Arthur Guinness both hardened 2 to 93p and 114p respectively.

Buildings enjoyed another firm session yesterday. Support in *front of their respective interim* statements to-day and to-morrow left Tilbury Contracting 4 up at 196p and Travis and Arnold 5 better at 81p. Tarmac, 140p, and Tunnel "B," 155p, were both around 4 harder, while AP Cement rose 3 to 155p, after 156p.

ICI put on 3 more to 320p in Chemicals. Laporte Industries hardened a penny to 91p in front of to-day's half-year figures.

Among firm Television concerns, HTV gained 3 to 43p; the preliminary results are due to-morrow.

BICC please

Half-year results comfortably above market expectations set the seal on a good day for BICC, which closed 6½ up at 104p, after 105p. Philips' Lamp moved ahead 43 to 918p, helped by the rise in the investment premium, Wall Street's early strength yesterday and Amsterdam advices. Thorn Electrical improved 6 more to 204p and EMI 3 further to 209p, while GEC ended 2 harder at 137p, after 138p. Outside the leaders, Stocklake featured with an advance of 6 at 27p in reflection of its Rhodesian interests. Racal Electronics were 6 higher at 179p, after 181p, while the chairman's encouraging statement at the annual meeting left Laurence Scott 2 firmer at 39p.

There was again little enthusiasm shown for leading Stores, although prices closed marginally firmer. "Gussies" "A" managed an improvement of 4 at 171p. Elsewhere, Lee Cooper scored a gain of 4 at 53p, while Status Discount, 41p, and Audiotronic, 37p, both put on 3. On the other hand, the first-half loss brought Brown Muff back 5 to 110p. Pittard Group highlighted otherwise little-changed Shoes and Leather, moving ahead 8 to 47p on consideration of the half-time profits upsurge.

Herbert Morris moved above the Babcock and Wilcox offer price of 120p when the former's quick opposition to the proposal promoted thoughts of an increased bid or the possibility of a counter-offer; Morris closed 9 higher at 127p, after 128p, while Babcock and Wilcox moved up 5 to 70p. Hall-Thermotank were also in demand and gained *another 5 to 72p; the offer from* APV, 3 dearer at 250p, was announced late yesterday evening. Elsewhere in Engineerings, Hawker rose 8 to 374p, after 376p, and GKN put on 4 to 282p, the latter in front of the large Polish contract, but Metalrax slipped 2 to 14p on lower interim results.

Late afternoon speculation of a revised higher bid, subsequently confirmed, took Manbre and Garton up 21 to 200p, a level which was maintained following the official announcement from Tate and Lyle, which reacted from 221p to close a net 2 lower at 215p. Other features in Foods included United Biscuits which, on further appraisal of the impressive first-half results, climbed 8 to 112p and Bernard Matthews, up 6 at 92p *after the marked mid-way* improvement and profits forecast. In Supermarkets, William Morrison responded to increased interim profits by rising 3 to 83p.

Grand Metropolitan remained in the van in Hotels, closing 2 higher at 62½p.

Fresh fall in Ozalid

Miscellaneous Industrial leaders continued to move forward in a thin trade. Advances of around 8 were secured by Metal Box, 243p, Rank Organisation, 147p, and Reed International, 228p, while Beecham, 327p, Boots, 111p, and Bowater, 168p, all ended 4 firmer. Elsewhere, Ozalid retreated 6 more to 97p for a two-day fall of 13, still depressed by the disappointing half-year results. Lower interim profits left Bodycote a penny cheaper at a low for the year of 32p, while Ega Holdings, at 46p, gave up the previous day's gain of 3 which followed the higher profits. Huntleigh closed 3 lower at 43p; the price in yesterday's issue was incorrect. News of the Stock Exchange decision to hold an inquiry into share dealings by the chairman and other directors left "Suits" unmoved at 53p, while the associated House of Fraser closed a penny easier at 62p. In brighter mood, Trafalgar House rose 4 to 92p with the aid of favourable Press comment, while Sale Tilney, on the good first half statement, put on 3 more to 112p. Hanson Trust added 5½ at 103p and Hay's Wharf 4 at 52p.

Among firm Motors and Distributors, Lucas gained 4 to 185p, while Dunlop improved 2 to 75p.

Other movements of note were few, but Lex continued to glean support from the recent good interim results and added 2 at 35½p.

United Newspapers rebounded after their recent lean spell to close 10 up at 220p; sellers may have changed tack because of the nearness of the interim results, due next Tuesday. Thomson recovered 6 to 278p. Paper-Printings also took a turn for the better and DRG picked up 4 to 100p, while McCorquodale regained 5 to 144p. Following remittance of the subsidiary's final dividend payment from Portugal, Eucalyptus Pulp moved up 4 to 45p.

Oils go higher

Overseas influences and, in particular, U.S. trends together with further business of a currency hedging nature were significant again in Oils. Royal Dutch rose 1½ to £40, and Shell gained 6 more to 392p. British Petroleum quietened—but hedged forward, helped by late U.S. inquiries, to close 3 higher at 608p, after 610p. Tricentrol responded to the excellent first-half results by rising 6 to 70p. Elsewhere Lasmo/Scot issues hardened 2 further to 1976 peaks of 230p, while Siebens (U.K.) rallied 5 to 105p.

Buying interest picked up a little in the Property leaders, where Land Securities improved 3 to 133p and English Property hardened 1½ to 39p. Secondary issues were also inclined to edge forward, although Intereuropean Properties, up 11½ the previous day on take-over hopes, reacted to 58p before closing a net 1½ easier at 61p. Law Land added 3 at 41½p, benefiting from the half-year statement. Property Holding and Investment rose 6 to 218p, while gains of 5 were registered in Imry, 138p, and United Real, 167p. Regional Properties "A" were a penny firmer at 30p following the full report, but the Australian Land Lease retreated 15 to 265p.

Overseas Traders participated in the general firmness. Agar Cross gained 3 to 19p in response to the agreed terms (currently worth 20½p per share) from Newman Industries, a penny harder at 48p. The first-half profits improvement left James Finlay 3 better at 128p. Lonrho added 2 more at 77p for a two-day rise of 7½ on consideration of its Rhodesian assets. Inchcape moved ahead 15 to 405p and Harrisons and Crosfield 13 to 400p.

Investment Trusts generally closed firmer, but profit-taking after the previous day's late gains on news of Kellock's acquisition of 29.9 per cent. and 16.4 per cent. of their respective share capitals left Lothian 3 cheaper at 23p and Belgrave Assets 2½ off at 14p.

FINANCIAL TIMES STOCK INDICES

—	Sept. 21	Sept. 20	Sept. 17	Sept. 16	Sept. 15	Sept. 14	A Year ago
Government Secs.	59.87	59.61	59.65	59.87	60.03	60.33	[illegible]
Fixed Interest	59.44	59.53	59.55	59.61	59.78	59.96	[illegible]
Industrial Ordinary	345.8	339.7	334.6	335.5	338.9	341.4	[illegible]
Gold Mines	122.4	111.8	114.8	111.4	109.5	103.7	[illegible]
Ord. Div. Yield	6.52	6.65	6.72	6.66	6.66	6.56	[illegible]
Earnings Y'ld % (full)	19.21	19.51	19.80	19.71	19.72	19.42	[illegible]
P/E Ratio (net) (*)	7.69	7.57	7.46	7.49	7.49	7.60	[illegible]
Dealings marked	4,403	4,118	4,227	4,001	4,287	4,034	[illegible]
Equity turnover £m	—	32.51	46.85	49.57	41.86	36.12	[illegible]
Equity bargains total	—	9,386	10,789	10,550	9,973	9,840	[illegible]

10 a.m. 342.9 11 a.m. 344.9 Noon 346.3 1 p.m. 345.7 2 p.m. 345.8 3 p.m. 343.9.

Latest index 01-246 8026.

(a) Based on 52 per cent. corporation tax. (b) Nil=7.63. Basis 100 Govt. Secs. 15/10/26. Fixed Int. 1928. Ind. Ord. 1/7/35. Gold Mines 12/9/55. SE Activity July-Dec. 1942.

HIGHS AND LOWS

—	1976 High	1976 Low	Since Compilation High	Since Compilation Low
Govt. Secs.	68.21 (5/1)	59.61 (20/9)	127.4 (9/1/35)	49.18 (3/1/75)
Fixed Int.	64.43 (2/2)	59.53 (20/9)	150.4 (28/11/47)	50.53 (3/1/75)
Ind. Ord.	420.8 (5/3)	334.6 (17/9)	544.6 (19/5/72)	49.4 (26/6/40)
Gold Mines	246.9 (2/1)	78.8 (23/8)	442.3 (22/6/75)	43.5 (26/10/71)

S.E. ACTIVITY

	Sept. 21	Sept. 20
Daily—		
Gilt Edged	167.3	[illegible]
Industrials	140.7	[illegible]
Speculative	45.0	[illegible]
Totals	100.2	[illegible]
5-day Av'ge.		
Gilt-Edged	156.2	[illegible]
Industrials	132.3	[illegible]
Speculative	42.7	[illegible]
Totals	93.2	[illegible]

Bucknall Trust came on offer at 14½p down 3½. News that Rothschild is selling its interest in the Manhattan Center, Brussels, a property venture in which the trust's £8.72m. costs had already been written down to a nil value, left the shares 2 harder at 200p. Among Financials stockjobbers Akroyd and Smithers put on 7 to 165p, after 168p, on hopes of increased turnover in the gilt market in the wake of the issue of the new long "tap" stock.

Early buying interest led to selling of Shippings at the higher levels. Interest waned considerably in the afternoon with sentiment clouded by nervousness about the outcome of the crucial seamen's pay talks. P & O Deferred, at 107½p, lost a penny of the previous day's gain of 4. Milford Docks cheapened a further 2 to 48p, still on the Boardroom unrest. Sheaf Steam shed 4 to 108p; the market is still awaiting news of the Ben Line Steamers bid negotiations.

John Haggas were a firm spot in Textiles, rising 25 to 303p in a thin market following the results. Worth (Bond) added 3 at 33p and Coats Patons hardened 2 to 50p, while Courtaulds edged forward a penny to 111p, after 112p.

Although closing firmer for choice, the Tobacco majors failed to attract much business yesterday. BATs Ordinary and the Deferred both ended 5 dearer at 260p and 210p respectively.

Hopes that the Kissinger/Smith talks will lead to a settlement of the Rhodesian constitutional issue helped South African Industrials close firmer for choice, Greatermans "A," 220p, and Tiger Oats, 450p, both put on 15.

Bandanga featured Plantations, rising 5 to 40p on the sharply higher first-half profits. Guthrie hardened 3 to 160p.

Buoyant Mines

Southern African issues were outstanding in a generally buoyant mining share market. Gold shares jumped in the wake of the sharp advance in the bullion price which at one time traded over $120 before closing $4.25 up at $119.50 per ounce. The Gold Mines index consequently put on 10.6 to 122.4—its highest level since July 28.

With buying orders emanating from all quarters, rises in the heavier priced issues ranged to a point while a substantial demand was also reported in the marginal stocks.

While hopes of a settlement of the Rhodesian political situation increased, shares of that country's mining issues continued to move ahead strongly. Falcon rose more to 115p, a two-day gain of 43, while Coronation were a further 8 higher at 82p. Globe and Phoenix and MTD Mangula were both 10 better at 47p and 110p respectively, while Wankie Colliery put on 6 to 48p.

Financials mirrored Golds. "Amgold" were ½ to the good at £13, while in front of the half-year results which are due to-morrow, Anglo American rose 10 to 278p. The London-based Financials improved, and were given additional fillip by the strength of U.K. Industrials. Charter Consolidated jumped 10 to 127p and Gold Fields 5 to 146p. Rio Tinto-Zinc were 10 higher at 176p in front of to-day's half-year results.

In Coppers, Messina gained 10 to 203p in sympathy with Rhodesians. Platinums gained ground. Australians were quietly firm reflecting the rise in the investment currency premium. Poseidon put on 10 to 75p, but profit-taking left Selcast 6 lower at 65p.

F.T.—ACTUARIES SHARE INDICES

These indices are the joint compilation of the Financial Times, The Institute of Actuaries and the Faculty of Actuaries

	EQUITY GROUPS GROUPS & SUB-SECTIONS Figures in parentheses show number of stocks per section.	Tuesday, September 21, 1976 Index No.	Day's Change %	Est. Earnings Yield % (Max) Corp. Tax 52%	Gross Div. Yield % (ACT at 35%)	Est. P/E Ratio (net) Corp. Tax 52%	Est. P/E Ratio (nil) Corp. Tax 52%	Mon. Sept. 20 Index No.	Friday Sept. 17 Index No.	Thurs. Sept. 16 Index No.	Wed. Sept. 15 Index No.	Year ago (approx.) Index No.	Highs and Lows Index 1976 High	1976 Low	Since Compilation High	Since Compilation Low
1	CAPITAL GOODS (179)	129.42	+2.6	19.80	7.16	7.50	7.43	126.15	125.59	125.22	126.52	123.70	160.06 (21/4)	125.22 (16/9)	206.37 (4/5/72)	50.17 (13/12/74)
2	Building Materials (30)	117.57	+3.0	18.81	8.04	8.03	8.03	114.10	113.49	112.47	113.62	119.47	150.16 (15/1)	112.47 (16/9)	233.84 (2/5/72)	44.27 (11/12/74)
3	Contracting, Construction (23)	175.54	+2.4	23.82	6.39	6.42	6.42	169.32	167.80	166.88	169.95	229.49	260.20 (16/1)	166.88 (16/9)	389.35 (19/5/72)	71.48 (2/12/74)
4	Electricals (16)	239.51	+3.6	16.60	5.55	8.01	7.60	231.15	228.35	227.53	228.45	214.10	287.30 (21/4)	225.92 (13/9)	350.04 (4/5/72)	86.71 (25/6/62)
5	Engineering (Heavy) (13)	156.54	+3.3	29.40	7.95	4.98	4.91	151.52	151.42	152.50	152.87	148.96	193.18 (3/5)	150.01 (25/8)	202.57 (6/6/75)	94.43 (1/2/75)
6	Engineering (General) (64)	119.13	+1.9	20.24	7.67	7.32	7.31	116.97	117.00	116.90	118.67	106.30	149.29 (3/6)	116.90 (16/9)	168.59 (4/5/72)	45.14 (6/1/75)
7	Machine and Other Tools (9)	51.09	+0.6	16.05	8.69	7.92	7.91	50.77	51.21	51.55	51.59	41.71	60.62 (3/5)	50.77 (20/9)	136.70 (4/7/68)	19.96 (13/12/74)
8	Miscellaneous (24)	114.13	+1.8	17.32	7.77	8.71	8.47	112.11	112.28	112.46	113.19	106.92	141.94 (11/6)	112.11 (20/9)	177.41 (27/4/72)	49.65 (6/1/75)
9	CONSUMER GOODS (DURABLE) (53)	108.34	+2.7	21.09	6.40	7.11	7.09	105.51	106.17	105.93	106.59	99.93	141.46 (21/4)	105.51 (20/9)	227.78 (21/4/72)	38.39 (6/1/75)
10	Lt. Electronics, Radio TV (15)	116.99	+3.4	20.52	4.98	7.19	7.17	113.11	113.94	113.04	113.28	120.82	160.35 (7/4)	113.04 (16/9)	257.41 (19/5/72)	42.55 (12/12/75)
11	Household Goods (13)	137.05	+1.4	21.49	8.72	7.09	7.06	135.08	135.94	136.13	137.03	146.23	187.22 (7/4)	135.08 (20/9)	263.22 (4/5/72)	63.92 (17/12/74)
12	Motors and Distributors (25)	70.46	+2.1	21.76	7.63	7.01	6.99	69.02	69.35	69.65	70.48	50.61	85.16 (3/6)	69.02 (20/9)	170.59 (15/1/69)	19.91 (6/1/75)
13	CONSUMER GOODS (NON-DURABLE) (169)	130.99	+2.2	16.77	7.35	9.02	8.93	128.19	127.97	127.55	128.75	159.89	162.34 (4/2)	127.55 (16/9)	236.08 (16/8/72)	61.41 (13/12/74)
14	Breweries (15)	148.21	+2.3	15.97	7.68	9.38	9.38	144.84	144.22	143.46	145.81	163.50	179.43 (2/2)	143.46 (16/9)	281.87 (28/11/72)	69.47 (13/12/74)
15	Wines and Spirits (7)	149.85	+2.6	15.80	7.31	9.72	9.72	146.05	146.61	146.66	148.07	141.70	190.67 (5/5)	144.44 (25/8)	257.40 (13/7/72)	78.71 (13/12/74)
16	Entertainment, Catering (14)	159.37	+2.5	15.66	8.37	9.85	9.77	155.55	153.98	153.10	154.46	169.67	211.26 (8/3)	153.10 (16/9)	329.99 (12/12/72)	54.87 (19/7/74)
17	Food Manufacturing (23)	145.46	+2.4	18.70	6.31	8.14	8.08	140.04	138.89	138.12	139.34	161.41	179.44 (11/5)	138.12 (16/9)	211.65 (1/5/72)	59.79 (11/12/74)
18	Food Retailing (16)	117.67	+1.7	15.62	6.65	9.37	9.37	115.75	114.75	113.62	115.88	146.23	150.06 (12/1)	113.62 (16/9)	235.08 (16/8/72)	54.55 (11/12/74)
19	Newspapers, Publishing (16)	167.41	+1.7	14.18	6.22	10.70	10.70	164.57	166.06	165.66	167.58	157.31	184.34 (11/3)	157.01 (2/6)	260.29 (18/1/73)	55.08 (6/1/75)
20	Packaging and Paper (12)	91.32	+3.0	16.40	8.57	9.38	9.38	88.62	88.69	88.74	88.69	93.98	112.50 (26/2)	88.62 (20/9)	135.69 (26/4/72)	43.46 (6/1/75)
21	Stores (34)	105.42	+1.6	14.46	6.64	10.63	10.62	103.77	103.72	104.12	104.90	131.47	136.24 (2/2)	103.72 (17/9)	204.39 (16/8/72)	52.53 (6/1/75)
22	Textiles (23)	128.81	+2.5	14.07	8.92	10.76	9.52	125.96	125.86	126.26	128.10	144.26	183.19 (30/1)	125.56 (17/9)	253.72 (17/9/68)	62.66 (11/12/74)
23	Tobaccos (3)	203.13	+2.6	21.67	8.50	6.90	6.90	198.03	199.49	197.51	197.61	193.15	241.89 (2/6)	197.02 (13/9)	339.16 (2/8/72)	94.34 (13/6/62)
24	Toys and Games (6)	67.43	+1.6	22.36	8.88	5.99	5.96	66.38	67.21	67.60	67.86	60.05	80.96 (16/7)	59.13 (22/1)	135.72 (16/1/70)	20.92 (6/1/75)
	OTHER GROUPS (95)															
25	Chemicals (26)	185.43	+1.3	16.28	6.06	8.37	8.37	184.96	183.37	182.84	184.60	177.80	231.38 (3/5)	182.84 (16/9)	231.38 (3/5/76)	71.20 (1/12/74)
26	Office Equipment (9)	79.99	+1.7	15.04	6.58	9.71	9.71	78.64	78.53	77.70	78.06	79.98	100.18 (19/5)	77.70 (16/9)	246.06 (1/9/72)	45.34 (2/1/75)
27	Shipping (12)	364.45	+0.1	13.64	7.18	10.51	9.50	364.18	365.41	362.30	363.54	358.61	432.64 (30/1)	355.52 (19/3)	517.00 (6/12/72)	90.80 (29/6/62)
28	Miscellaneous (48)	138.33	+2.6	16.62	8.40	9.04	9.05	134.77	134.85	134.15	134.62	142.91	172.96 (21/4)	134.15 (16/9)	258.83 (2/6/72)	60.39 (6/1/75)
29	INDUSTRIAL GROUP (496)	135.12	+2.2	17.56	7.12	8.45	8.36	132.16	131.63	131.35	132.80	136.39	165.38 (3/5)	131.35 (16/9)	220.17 (1/5/72)	59.01 (13/12/74)
30	OILS (4)	344.51	+1.0	12.34	5.08	9.38	8.65	341.05	338.31	330.52	324.27	307.29	395.84 (20/5)	324.25 (14/9)	431.66 (29/5/69)	87.23 (29/5/62)
31	500 SHARE INDEX	152.18	+2.0	16.68	6.78	8.58	8.40	149.15	148.62	147.61	148.22	150.60	183.00 (3/5)	147.61 (16/9)	227.96 (16/8/72)	63.49 (13/12/74)
32	FINANCIAL GROUP (100)	115.33	+2.5	—	6.79	—	—	112.57	110.99	110.77	110.71	132.29	153.46 (30/1)	110.71 (15/9)	241.41 (1/4/72)	55.88 (13/12/74)
33	Banks (6)	143.02	+3.1	23.82	6.42	6.54	6.64	138.74	134.86	134.87	135.80	167.54	192.16 (29/1)	134.87 (16/9)	286.32 (20/7/72)	62.44 (12/12/74)
34	Discount Houses (10)	135.63	+4.2	—	10.20	—	—	130.08	129.87	131.63	131.75	153.86	186.52 (13/1)	129.87 (17/9)	293.13 (2/7/72)	81.40 (10/12/74)
35	Hire Purchase (5)	80.62	—0.2	8.97	8.13	24.80	24.80	80.74	81.69	81.69	81.69	94.65	132.10 (26/3)	80.62 (21/9)	433.72 (4/5/72)	38.83 (11/12/74)
36	Insurance (Life) (10)	96.24	+3.0	—	7.80	—	—	93.46	92.48	92.02	90.22	112.07	129.46 (30/1)	90.22 (15/9)	194.46 (15/3/72)	44.88 (2/1/75)
37	Insurance (Composite) (7)	92.91	+2.9	—	7.78	—	—	90.94	89.80	89.72	89.65	106.21	119.75 (30/1)	89.65 (15/9)	155.76 (21/4/72)	43.96 (13/12/74)
38	Insurance Brokers (9)	215.40	+3.1	12.57	5.36	12.08	12.08	211.96	207.66	206.88	206.30	201.95	276.90 (11/5)	206.30 (15/9)	276.90 (11/5/76)	65.86 (16/12/74)
39	Merchant Banks (15)	57.68	+0.2	—	9.64	—	—	57.55	57.95	57.86	58.06	58.67	93.83 (27/1)	57.55 (20/9)	278.57 (1/5/72)	31.21 (7/1/75)
40	Property (32)	139.91	+1.7	4.47	3.94	39.80	37.93	137.56	137.25	136.46	136.33	172.39	194.57 (30/1)	136.33 (15/9)	357.40 (9/11/73)	56.01 (20/4/65)
41	Miscellaneous (6)	70.59	+3.7	19.92	11.79	7.58	7.58	68.10	69.19	68.98	68.20	68.07	91.96 (3/2)	68.10 (20/9)	303.13 (18/5/72)	33.29 (17/12/74)
42	Investment Trusts (50)	138.73	+1.1	3.86	5.47	26.78	26.78	137.28	137.05	136.94	137.95	160.17	184.55 (30/1)	136.94 (16/9)	246.79 (25/4/72)	71.63 (13/12/74)
43	ALL-SHARE INDEX (650)	142.67	+2.1	—	6.71	—	—	139.80	139.06	138.27	138.76	146.30	172.64 (30/1)	138.27 (16/9)	228.18 (1/5/72)	61.92 (13/12/74)
	COMMODITY GROUPS *(Not included in 500 or All-Share indices)*															
44	Rubbers (9)	470.18	—	9.86	6.97	14.68	13.50	470.26	474.99	479.92	480.19	381.21	523.40 (7/6)	404.67 (14/1)	565.37 (23/7/73)	84.68 (25/8/65)
45	Teas (9)	131.46	+0.3	30.81	9.65	4.31	4.19	131.13	131.13	131.36	131.43	104.38	142.43 (8/7)	117.89 (7/1)	142.43 (8/7/76)	59.72 (17/10/74)
46	Coppers (3)	190.23	+2.3	34.06	5.89	2.94	2.94	185.99	181.42	185.42	184.87	264.82	301.47 (7/1)	177.60 (9/8)	567.78 (13/7/73)	94.08 (29/4/62)
47	Mining Finance (11)	85.91	+1.6	12.14	5.85	9.27	9.20	84.52	83.82	84.41	84.62	102.17	119.77 (7/1)	83.82 (17/9)	175.90 (28/4/69)	66.31 (30/9/74)
48	Tins (7)	102.05	—0.3	15.69	9.84	9.78	9.74	102.98	103.06	102.91	102.80	95.21	119.14 (20/7)	86.09 (9/2)	125.43 (12/1/73)	54.83 (27/5/71)
49	Overseas Traders (13)	208.10	+2.3	15.80	5.30	7.99	7.98	203.38	201.85	202.99	202.39	213.18	254.47 (3/6)	200.20 (31/8)	254.47 (3/6/76)	97.87 (6/1/75)

	FIXED INTEREST	Tuesday, Sept. 21 Index No.	Yield %	Monday, Sept. 20	Friday Sept. 17	Thurs. Sept. 16	Wed. Sept. 15	Tuesday Sept. 14	Monday, Sept. 13	Friday Sept. 10	Year ago (approx.)	1976 High	1976 Low	Since Compilation High	Since Compilation Low
1	Consols 2½% yield	—	14.63	14.75	14.71	14.60	14.59	14.48	14.48	14.46	14.22	—	—	—	—
2	20-yr. Govt. Stocks (6)	46.04	‡14.07	45.75	45.77	46.04	46.29	46.66	46.42	46.78	50.07	53.46 (30/1)	45.75 (20/9)	115.48 (11/9/65)	38.37 (3/1/75)
3	20-yr. Red. Deb. & Loans (15)	47.49	15.83	47.56	46.29	46.46	46.56	46.63	46.78	47.49	48.45	52.40 (21/5)	46.29 (17/9)	113.43 (25/10/63)	37.01 (4/1/75)
4	Investment Trust Prefs. (15)	47.14	14.69	47.14	47.19	47.14	47.19	47.35	47.35	47.79	46.35	51.23 (18/3)	45.43 (7/6)	114.41 (13/9/63)	34.46 (4/12/74)
5	Coml. and Indl. Prefs. (20)	64.55	14.74	64.69	64.97	64.93	65.40	67.23	67.23	68.11	63.55	71.97 (2/3)	62.76 (2/1)	114.95 (7/10/65)	47.67 (6/1/75)

Section or Group	Base Date	Base Value
Overseas Traders	31/12/74	100.00
Engineering (Heavy)	31/12/71	153.84
Engineering (General)	31/12/71	153.84
Wines and Spirits	16/1/70	144.76
Toys and Games	16/1/70	135.72
Office Equipment	16/1/70	162.74
Industrial Group	31/12/70	128.20
Miscellaneous Financial	31/12/70	128.06
Food Manufacturing	29/12/67	114.13
Food Retailing	29/12/67	114.13
Insurance Brokers	29/12/67	96.67
Mining Finance	29/12/67	100.00
All Other	10/4/62	100.00

‡ Redemption yield. FT-Actuaries indices are calculated by Extel Communications Limited (a member of the Exchange Telegraph Group) on an IBM 370 computer.

A list of the constituents of the FT-Actuaries Share Indices is now available from the Publishers, the Financial Times, Bracken House, Cannon Street, London, EC4P 4BY, price 13p. By post 20p.

A record of the indices, cost £38, is obtainable from FT Business Enterprises, 10, Bolt Court, London, EC4. It gives all group and sub-section indices at fortnightly intervals since the start of the series in 1962 with quarterly highs and lows. Dividend and earnings figures are also included.

CONSTITUENT CHANGES: Anglo-Continental Inv. and Finance (Misc. Financial) has been replaced by Hambro Life Assurance (Insurance Life). Dawnay Day Group has been reclassified from Merchant Banks to Misc. Financial.

ACTIVE STOCKS

Stock	Denomination	No. of marks	Closing price (p)	Change on day	1976 high	1976 low
Bats Defd.	25p	15	210	+ 5	225	193
Barclays Bank	£1	13	247	+ 9	350	230
ICI	£1	12	320	+ 3	402	312
Nat. Westminster	£1	10	217	+ 7	272	201
Shell Transport	25p	10	392	+ 6	462	374
Grand Met.	50p	9	62½	+ 2	88	58
RTZ	25p	9	166	—	230	133
United Biscuits	25p	9	112	+ 8	138	103
Babcock & Wilcox	25p	8	70	+ 5	91	62
Beecham	25p	8	327	+ 4	390	314
Cons. Gold Fields	25p	8	146	+ 5	220	128
Distillers	50p	8	122	+ 3	158	116
Inchcape	£1	8	405	+15	452	360
BP	£1	7	608	+ 3	685	557
Coats Patons	25p	7	50	+ 2	70½	48

The above list of active stocks is based on the number of bargains recorded yesterday in the Official list and under Rule 163(1) (e).

Option Report—3-month call Rates

OPTION DEALING DATES

First Dealings	Last Dealings	Last Declaration	For Settlement
Sep. 1	Sep. 13	Nov. 25	Dec. 7
Sep. 14	Sep. 27	Dec. 9	Dec. 21
Sep. 28	Oct. 11	Dec. 30	Jan. 4

"Calls" were arranged in Metal Box, Dunlop, Allied Retail Trades, National Westminster Bank, Grand Metropolitan, Charterhall, Beecham, Consolidated Gold Fields, ICI, Bowater, Shell Transport, Courtaulds, Sheaf Steam, Berry Wiggins, Lonrho and BSG International. "Puts" were reported in Mams, Cavenham, Beaverbrook and Intereuropean Properties, while doubles were transacted in British Land, Consolidated Gold Fields, Burmah Oil, Courtaulds, EMI, Vickers, ICI, John Brown, Britannic Assurance, Berry Wiggins, Beecham, Mather and Platt and Shell Transport.

Industrials		E.M.I.	17	Midland Bank	24	Cap. Counties	5
		Fitch Lovell	6	Nat'lWest Bank	20	E.P.	5
A. Brew	6½	Gen. Accident	12	"Do" Warrants	7½	Int. Europe	7
A. P. Cement	15	Gen. Electric	13	P& O Dfd	11	Land Securities	14
Assoc Leisure	3	Glaxo	35	Plessey	7	MEPC	7
BSR	9	Grand Met	7	R.H.M.	5	Peachey	5
Babcocks	8	G.U.S. 'A'	16	Rank Org. 'A'	18	SamuelProps	4½
Barclays Bank	22	Guardian	18	Reed Int'l	25	Town & City	2½
Berrywiggins	6	G.K.N.	26	Reyrolle	11		
Beecham	28	Hawker Sidd.	35	Rothmans	4	Oils	
Boots Drug	12	House of Fraser	8	Slater Walker	4	Brit. Petroleum	40
Bowaters	16	I.C.I.	20	Spillers	4	Burmah Oil	4½
B.A.T.	21	"Imps"	7	Tesco	4	Shell	27
BritishLeyland	5	I.C.L.	14	Thorn 'A'	22	Ultramar	14
BOC In.	5½	Inveresk	7	Trust Houses	9		
Brown (J.)	9	Legal& General	12	Tube Invest	27	Mines	
Burton 'A'	6½	Ladbroke	11	Unilever	38	Charter Cons	15
Cadburys	5	Lex Service	3½	Utd. Drapery	8	Chart'rh'll Fin.	4
Cavenham	10	Lloyds Bank	22	Vickers	15	Cons Gold	15
Courtaulds	11	"Lofs"	4	WilliamsHud'n	4	HamptonAreas	12
Debenhams	8	London Brick	4½	Woolworths	6	Lonrho	19
Distillers	15	Lucas Inds	20			Rio T. Zinc	18
Dunlop	7½	"Mams"	7	Property		Western M.ng.	9
Eagle Star	11	Marks& Sp'ncer	8	Brit. Land	3½		

MONEY MARKET

Small assistance

Bank of England Minimum Lending Rate 13 per cent. (since September 10, 1976)

Day-to-day credit was in slightly short supply in the London money market yesterday and the authorities gave assistance by purchasing a small amount of Treasury bills direct from the houses. The market was helped by bank balances brought forward and quite a large excess of Government disbursements over revenue transfers to the Exchequer. These were outweighed by a fairly large net take-up of Treasury bills and an increase in the note circulation.

Discount houses paid around 12½ per cent. for secured call loans in the early part and by the close rates had eased to 11-11½ per cent. In the interbank market, overnight loans opened at 12¼-12½ per cent. and rates fell on the possibility of a surplus to 11¾-12 per cent. before easing further towards the end to 9½-10½ per cent. Short term fixed period interest rates showed little change.

Rates in the table below are nominal in some cases.

Sept. 21 1976	Sterling Certificates of deposits	Interbank	Local Authority deposit*	Local Auth. negotiable bonds	Finance House deposits	Company deposits	Discount market deposits	Treasury bills ф	Bank Bills ф	Fine Trade Bills ф
Overnight	—	9½-12½	—	—	—	12½-12¾	10¼-12¼	—	—	—
2 days notice	—	—	12⅝-12½	—	—	—	—	—	—	—
7 days or 7 days notice	—	12⅜-12⅝	12⅛-12⅜	—	12¾-12⅞	—	12⅛-12⅜	—	—	—
One month	[illegible]	12½-12⅝	12½-12¾	12¾-12¼	12½-13	—	12¼	[illegible]	12½	13¼-13
Two months	[illegible]	12⅝-12¾	—	12¾-12¼	12½-13	—	12½	[illegible]	12½	13¼-12⅞
Three months	[illegible]	12¾-12⅞	12⅝-12¾	12¾-12¼	12¾-13⅛	—	12¼	[illegible]	12½-13	13¼-12⅞
Six months	[illegible]	12¾-12⅞	12⅝-12¾	13-12¼	12¾-13¼	—	—	—	12½-12¾	13¼-12¾
Nine months	12¾-12⅞	[illegible]	—	13-12½	13-13⅜	—	—	—	—	—
One year	12⅞-12¾	[illegible]-13	13-13¼	13-12½	13-13⅜	—	—	—	—	—
Two years	—	—	13⅛-13⅝	—	—	—	—	—	—	—

Local authorities and finance houses seven days' notice, others seven days' fixed. * Long-term local authority mortgage rate nominally three years 12½-12¾ per cent.; four years 13½-14½ per cent.; five years 14[illegible]-14½ per cent. ф Bank bill rates in table are buying rates for prime paper. Buying rates for four-month bank bills 12½-12¾ per cent.; four-month trade bills 13½-13¾ per cent. Approximate selling rate for one-month Treasury bills 12[illegible] per cent.; two-month 12[illegible] per cent.; and three-month 12[illegible] per cent. Approximate selling rate for one-month bank bills 12[illegible] per cent.; two-month 12[illegible] per cent.; and three-month 12[illegible] per cent.; one-month trade bills 13½-13¾ per cent.; two-month 13[illegible] per cent.; also three-month 13½-13¾ per cent.

Finance House Base Rates (published by the Finance Houses Association) 11½ per cent. from August 1, 1976. Clearing Bank Deposit Rates for small sums at seven days' notice 8½ per cent. Clearing Bank Rate for lending 12 per cent. Tr[illegible] three-month 12½-12⅝ per cent.

NEW HIGHS AND LOWS FOR 1976

The following securities quoted in the Share Information Service yesterday attained new Highs and Lows for 1976.

NEW HIGHS (17)

AMERICANS (9)

Baker Intnl. Cpn.
Barnes Group
Eaton Corpn.
Exxon
Fluor Corpn.
IBM Corpn.
Shell Oil
Tenneco Inc.
Xerox Corpn.

INDUSTRIALS (2)

Pentland
Schlumberger

INSURANCE (1)

Travelers

TEXTILES (2)

Early (C.) & Marriott
Foster (J.)

OILS (2)

Lasmo Ops.
Scot Ops.

MINES (1)

Northgate

NEW LOWS (34)

BUILDINGS (6)

Cement Roadstone
Crossley Bldg.
Greaves Org.
Lilley (F. J. C.)
Milbury
Sharpe and Fisher

CHEMICALS (1)

British Tar

STORES (1)

Geller (A. & J.)

ELECTRICALS (2)

Cohen Bros.
Electrocomponents

ENGINEERING (7)

Auto-Oil
Cartwright (R.)
Cummins '78-94
Metalrax
Morris (H.)
Pegler-Hattersley
Pratt (F.)

FOODS (1)

Baileys of Yorkshire

INDUSTRIALS (12)

Bodycote Intnl.
Bruntons (Musselb.)
Crowder
Elson & Robbins
Extel
Gibbons Dudley
Huntleigh
Newey
Ozalid
Ropner 'A'
Trans. Union
Transport Dev

MOTORS (1)

Henlys

TRUSTS (2)

Inc. Inv. Tst. Jersey
Moorside Trust

OVERSEAS TRADERS (1)

Mitchell Cotts

RISES AND FALLS YESTERDAY

	Up	Down	Same
British Funds	53	—	2
Corpns., Dom. and Foreign Bonds	14	1	48
Industrials	583	119	1,006
Financial and Prop.	234	24	310
Oils	12	1	23
Plantation	4	6	31
Mines	79	6	57
Recent Issues	16	5	16
Totals	995	162	1,495

BASE LENDING RATES

Allied Irish Banks Ltd.	13
American Express Bank	12
Anglo-Portuguese Bank	12
Henry Ansbacher	12
Banco de Bilbao	12
Bank of Cyprus	12
Bank of N.S.W.	12
Banque du Rhone S.A.	12
Barclays Bank	12
Barnett Christie Ltd.	12
Bremar Holdings Ltd.	12
Brit. Bank of Mid. East	12
■ Brown Shipley	12
Canada Permanent AFI	12
Capitol C & C Fin. Ltd.	13
Cayzer, Bowater Co. Ltd.	12
Cedar Holdings	12
■ Charterhouse Japhet	12
C. E. Coates	13
Consolidated Credits	12
Co-operative Bank	*12
Corinthian Securities	12
Credit Lyonnais	12
G. R. Dawes	13
Duncan Lawrie	12
Eagil Trust	12
English Transcont.	12
First London Secs.	13
■ Antony Gibbs	12
Goode Durrant Trust	11
Greyhound Guaranty	12
Grindlays Bank	‡12
■ Guinness Mahon	12
■ Hambros Bank	12
■ Hill Samuel	§12
C. Hoare & Co.	†12
Julian S. Hodge	13
Hongkong & Shanghai	12
Industrial Bank of Scot.	10
Keyser Ullmann	12
Knowsley & Co. Ltd.	13
Lloyds Bank	12
London & European	12
London Mercantile	12
Midland Bank	12
■ Samuel Montagu	12
■ Morgan Grenfell	12
National Westminster	12
Northern Comm. Trust	12
Norwich General Trust	12
P. S. Refson & Co.	12
Rossminster Accept'cs.	12
Schlesinger Limited	12
E. S. Schwab	13
Security Trust Co. Ltd.	13
Shenley Trust	14
Standard Chartered	12
Trade Development Bk.	12
Twentieth Century Bk.	13
United Bank of Kuwait	12
Whiteaway Laidlaw	12
Williams & Glyn's	12
Yorkshire Bank	12

■ Members of the Accepting Houses Committee.
* 7-day deposits 8½%, 1-month deposits 8¾%.
† 7-day deposits on sums of £10,000 and under 8½%, up to £25,000 9%, over £25,000 9¼%.
‡ Demand deposits 8½%.
§ Call deposits over £1,000 8½%.

CORAL INDEX
Close 346-351

INSURANCE BASE RATES

† Atlantic Assurance	12
Cannon Assurance	10

† Address shown under Insurance and Property Bond table.

AUTHORISED UNIT TRUSTS

[illegible]

REGIONAL MARKETS

...selection of the share prices previously shown under regional headings is ...ted below with quotations on London. Irish issues, most of which are not ...ly listed in London, are shown separately and with prices as on the Irish ...ge.

						IRISH		
			Higsons Brew.	78	......	Conv. 9% '80/82	£81¼	......
...Inv. 20p	19	......	I.O.M. Stm. £1	137	......	Alliance Gas	51	......
...nning	34	......	Holt (Jos.) 25p	215	......	Arnott	212	......
...B	23	......	Kleen-e-Ze	30	......	Carroll (P.J.)	108	......
...r. Est. 50p	139	+3	Lovell's Ship £1	97	......	Clondalkin	40	......
...r Croft	21	......	N'thn. Goldsmith	26	......	Concrete Prods.	42	−1
...& Rose £1	350	......	P.M.A.	29	+2	Heiton (Hldgs.)	24	......
...(R.A.)	17	......	Pearce (C. H.)	85	......	Ind. News	38	......
...& McHdy.	65	......	Peel Mills	12	......	Ins. Corp.	154	......
...Fr'k. 10p	22	......	RobbCaledon5b.	56	......	Irish Distillers	46	......
...ed	11	......	Sayers 12½p	16	......	Irish Ropes	90	......
...Forge	54	......	Sheffield Brick	82	......	Jacob	55	......
...Pkg. 5p	16	......	Sheff. Refrshmt.	135	......	Sunbeam	12	......
...Ship. £1	340	......	Shiloh Spinn.	23	......	T.M.G.	79	......
...Sleigh 10p	7	......	Sindall (Wm.)	50	......	Unidare	48	−½

THE GREAT NORTHERN ...ELEGRAPH COMPANY LIMITED OF DENMARK

...NTERIM STATEMENT FOR THE FIRST HALF OF 1976

...oup turnover was about 10% up on the first half of 1975. ...e turnover in Storno A/S is not included in the comparison ... Storno ceased to be a member of the group in 1976.

...ile the parent company ordinary results (after depreciation ... before extraordinary items, taxation, etc.) have shown a ...ll improvement compared with the preceding year, group ...ults were somewhat weaker.

...e same tendency is expected for the whole year but in ...sequence of various extraordinary receipts parent company ... group net results are expected to be better than the ...r before.

...en evaluating the outlook for the near future it has been ...en into account that the upward economic trend has not ... resulted in any significant improvement in marketing ...ditions. The high level of costs has affected the earning ...acity of the companies adversely, and prospects of an ...rovement are dependent on costs in Denmark rising at a ...ver rate than those abroad.

APOLLO

Edited by Denys Sutton

The world's ...eading magazine of Arts and Antiques

Published Monthly price £1.50
...nnual Subscription £18.00 (inland)
Overseas Subscription £20.00
...JSA & Canada Air Assisted $48

Apollo Magazine, Bracken House, 10 Cannon Street, London EC4P 4BY
Tel: 01-248 8000

INSURANCE, PROPERTY, BONDS

[illegible]

OFFSHORE AND OVERSEAS FUNDS

[illegible]

NOTES

[illegible]

FT SHARE INFORMATION SERVICE

**BRITISH FUNDS

1976 High	Low	Stock	£	+ or −	Yield Int.	Red.
		"Shorts" (Lives up to Five Years)				
101¹³⁄₁₆	99⅞	Treasury 10½pc 1976‡‡	99½	.....	10.56	12.83
98⁵⁄₁₆	95⅞	Treasury 6¾pc 1977‡‡	97⅝xd	−⅛	6.42	12.27
97¼	94½	Electric 3pc '74-77	96½xd	−⅛	3.11	10.74
103¾	92⅞	Treasury 11½pc '77‡‡	99⁹⁄₁₆xd	−⅛	11.56	12.12
95⅛	91⅞	Treasury 3pc '77‡‡	93½	.....	3.21	9.05
95⅝	92¼	Transport 4pc '72-77	93¾	+⅛	4.27	9.41
99⅞	90½	Treasury 9pc 1978‡‡	96⅛	+¼	9.37	12.00
101½	97	Treasury 10½pc '78‡‡	97⅞	+⅛	10.78	12.07
93¼	89⅝	Exchequer 5pc '76-78‡‡	92⅛xd	+⅛	5.42	9.36
103¾	97¼	Treasury 11½pc '79‡‡	98⅞	+⅛	11.67	12.20
88⅞	83⅝	Treasury 3pc '79‡‡	86⅜xd	−⅛	3.48	8.32
89⅝	73⅞	Electric 4¼pc '74-79	86¼xd	−⅛	4.93	9.62
100⅞	94½	Treasury 10¼pc '79‡‡	94⅞	−⅛	11.07	12.52
88¼	83⅝	Electric 3½pc '76-79	85⅛	+¼	4.11	9.02
96⅞	90⅝	Treasury 8pc 1980‡‡	90⅞	−⅛	9.91	12.36
96½	90⅞	Treasury 8½pc '80‡‡	90¼	+⅛	10.47	12.73
86	82¼	Treasury 3½pc '77-80	83⅝	+¼	4.20	8.82
89½	71	Funding 5¼pc '78-80‡‡	85¼	−⅛	6.16	10.08
103¾	96⅞	Treasury 11½pc 1981‡‡	96½	+⅛	11.92	12.53
86	79	Treasury 3½pc 1979-81	82¾	+⅛	4.23	8.24
95⅝	89⅞	Treasury 9¾pc 1981‡‡●	89½xd	−⅛	10.89	12.89
		Five to Fifteen Years				
94⅛	86	Treasury 8¼pc '80-82‡‡	86⅝	−⅛	10.80	12.41
107¾	95¼	Treasury 12pc 1983‡‡	95¾xd	−⅛	12.55	13.04
81⅛	73¼	Funding 5½pc '82-84‡‡	74	+¼	7.54	10.95
87⅝	79	Treasury 8½pc '84-86‡‡	79¼	−¼	10.96	12.54
74½	67⅛	Funding 6½pc '85-87‡‡	67½	+⅛	10.01	12.57
77⅝	69¼	Treasury 7¾pc '85-88‡‡	69½	+¼	11.35	13.21
51¼	45⅝	Transport 3pc '78-88	47	−¼	6.48	11.39
59¾	50⅞	Treasury 5pc '86-89	51½xd	−¼	9.72	12.72
103¾	92½	Treasury 13pc 1990‡‡	92¾	+⅛	14.40	14.65
75⅝	68	Treasury 8¼ 87 90‡‡	68¼	+¼	12.50	13.83
60	50¾	Funding 5¾pc '87-91‡‡	51xd	+¼	11.23	13.50
		Over Fifteen Years				
100½	87⅝	Treasury 12¾pc '92‡‡	89¼	+¼	14.64	14.89
98½	85¾	Treasury 12½pc '93‡‡	87¼	+½	14.73	14.97
58	48¾	Funding 6pc 1993‡‡	48⅝xd	−⅛	12.37	14.02
75⅜	66⅛	Treasury 9pc '94‡‡	67⅝	+⅛	13.96	14.61
—	—	Treasury 14½pc '94‡‡	£96½E	.....	15.03	15.07
36½	31⅞	Gas 3pc '90-95	32	+⅛	9.74	12.87
100	87⅞	Treasury 12¾pc '95‡‡	90¼	+¼	14.88	15.02
75⅜	63¾	Treasury 9pc '92-96‡‡	64	+¼	14.10	14.67
95¾	92½	Exchequer 13¾pc '96‡‡	92⅜	+¼	14.95	15.06
35½	30	Redemption 3pc 1986-96	30¼xd	+¼	9.89	12.63
102½	88	Treasury 13¼pc '97‡‡	90¾	+¼	14.97	15.05
70⅛	61¾	Treasury 8¾pc 1997‡‡	62⅛	+⅜	14.20	14.68
57⅝	50⅛	Treasury 6¾pc '95-98‡‡	51⅝	+½	13.79	14.54
76	65½	Treasury 9½pc 1999‡‡	67⅝	+⅜	14.43	14.74
31½	27¼	Funding 3½pc '99-04	27½	+¼	13.04	13.95
65	54⅛	Treasury 8pc '02-06‡‡	54¾xd	−⅛	14.54	14.71
46⅛	37⅞	Treasury 5½pc '08-12‡‡	38¼	+⅛	14.45	14.60
60⅞	52¼	Treasury 7¾pc '12-15‡‡	53⅞	+¼	14.72	14.75
		Undated				
30⅝	26⅜	Consols 4pc	26⅞	+⅛	15.20	—
27⅞	24⅛	War Loan 3½pc‡‡	25⅛	−⅛	14.56	—
28⅞	24⅝	Conv. 3½pc '61 Aft.	24¾xd	+⅛	14.09	—
23¼	19⅝	Treasury 3pc 66 Aft.	19⅞xd	+⅛	15.01	—
19⅝	16⅞	Consols 2½pc	17xd	+⅛	14.63	—
19½	16¼	Treasury 2½pc	16⅜xd	+⅛	15.21	—

**INTERNATIONAL BANK

1976 High	Low	Stock	£	+ or −	Yield Int.	Red.
75	68½	5pc Stock '77-82	73½	.....	7.84	11.99

**CORPORATION LOANS

COMMONWEALTH & AFRICAN LOANS

LOANS (Miscel.)

FOREIGN BONDS & RAILS

U.S. $ & DM prices exclude inv. $ premium

AMERICANS

S.E. List Premium 42¼% (based on $1.7168 per £)

Conversion factor 0.7014 (0.7109)

CANADIANS

1976 High	Low	Stock	£	+ or −	Div. Gross	C'vr	Y'ld Gr's
13¾	10⅝	Bk. Montreal $2	13¼	+⅛	$1.00	—	4.5
36	29¼	Bk. Nova Scot. $2	35⅝	+¼	$1.72	—	2.8
43¼	33¾	Bell Canada 25c	42½	+⅝	$3.72	—	5.0
23⅝	12	Bow Valley‖	17⅛	−¼	10c	—	0.3
10	780p	Brascan‖	940p	+25	s$1.00	—	6.0
29⅞	19¼	Can. Imp. Bk. $2	22⅝	−¼	$1.28	—	3.2
16¾	10⅝	Can. Pacific $5	14¾	+¼	84½c	—	3.3
29⅝	26½	Do. 4pc Deb. £100	27¾	.....	4%	—	14.4
37½	21¼	Gulf Oil Can.‖	22½	−⅛	$1.00	—	2.5
670p	450p	Hawker Sid. Can.‖	480p	−10	36c	—	4.3
32¼	22	Hollinger $5	31	.....	$1.80	—	3.3
18	12⅞	Hudson's Bay‖	14⅞xd	+⅛	60c	—	2.4
34⅝	26⅝	Hud. B. Oil G. $2½	29¼	.....	$1.40	—	2.8
22¼	16½	Imperial Oil‖	18	.....	26.8	—	2.5
31¼	19½	Inco	28¾	+⅜	$1.40	—	2.8
820p	660p	Int. Nat. Gas $1	800p	.....	80c	—	5.7
25½	16	Massey Ferg.‖	21⅛	+⅛	$1.00	—	2.7
27⅝	20¼	Pacific Pet. $1	22½	+⅝	80c	—	2.0
38½p	24p	Place Gas $1	30p	.....	—	—	—
29⅞	22⅝	Rio Algom	27⅞	.....	$1.00	—	2.0
25⅞	20¾	Royal Bk. Can. $2	24½	+⅛	$1.28	—	2.9
28⅞	17⅞	Seagram Co. C$1	20⅝	+⅞	90c	—	2.2
16⅝	13⅛	Tor. Dom. Bk. $1	16½	+⅛	70c	—	2.4
11	830p	Trans Can. Ppe $5g	11	+¼	88c	—	0.0
790p	650p	White Pass	650p	.....	‡35c	—	3.1

S.E. List Premium 42¾% (based on $1.6782 per £)

BANKS AND HIRE PURCHASE

Hire Purchase, etc.

BEERS, WINES AND SPIRITS

BUILDING INDUSTRY, TIMBER AND ROADS

BUILDING INDUSTRY—Continued

CHEMICALS, PLASTICS

CINEMAS, THEATRES AND TV

DRAPERY AND STORES

DRAPERY AND STORES—Continued

ELECTRICAL AND RADIO

ENGINEERING, MACHINE TOOLS

ENGINEERING—Continued

FOOD, GROCERIES, ETC.

HOTELS AND CATERERS

HOTELS—Continued

INDUSTRIALS (Miscel.)

INDUSTRIALS—Continued

[illegible]

INSURANCE

[illegible]

MOTORS, AIRCRAFT TRADES

Motors and Cycles

[illegible]

Commercial Vehicles

[illegible]

Components

[illegible]

Garages and Distributors

[illegible]

NEWSPAPERS, PUBLISHERS

[illegible]

PAPER, PRINTING, ADVERTISING

[illegible]

PROPERTY

[illegible]

PROPERTY—Continued

[illegible]

SHIPBUILDERS, REPAIRERS

[illegible]

SHIPPING

[illegible]

SHOES AND LEATHER

[illegible]

SOUTH AFRICANS

[illegible]

TEXTILES

[illegible]

TOBACCOS

[illegible]

TRUSTS, FINANCE, LAND

Investment Trusts

[illegible]

TRUSTS—Continued

[illegible]

Finance, Land, etc.

[illegible]

OILS

[illegible]

OVERSEAS TRADERS

[illegible]

RUBBERS AND SISALS

[illegible]

TEAS

India and Bangladesh

[illegible]

Sri Lanka

[illegible]

Africa

[illegible]

MINES

CENTRAL RAND

[illegible]

EASTERN RAND

[illegible]

MINES—Continued

FAR WEST RAND

1976 High	Low	Stock	Price	+ or −	Div Net	Cvr	Y'ld Gr's
710	250	Blyvoor 25	360	+40	Q75c	ϕ	13.5
£14	440	Buffels R1	620	+40	Q125c	ϕ	13.0
198	70	Deelkraal R0.20	105	+7	—	—	—
760	125	Doornfontein R1	260	−30	Q55c	2.2	13.7
965	330	East Drie R1	560	+40	Q75c	1.7	8.7
280	122	Elandsrand Gld. 20c	160	+12	—	—	
190	41	Elsburg R1	94	+8	‡Q33.8c	1.0	‡
£16½	520	Hartebeest R1	812	+62	Q190c	ϕ	17.2
695	260	Kloof Gold R1	370	+25	Q47c	1.5	6.2
760	140	Libanon R1	510	+40	Q80c	2.0	16.7
740	230	Southvaal 50c	355	+25	Q8c	1.3	1.5
245	92	Stilfontein 50c	142	+15	‡Q36c	2.2	‡
£20¾	700	Vaal Reefs 50c	937	+62	‡Q175c	2.1	‡
420	48	Venterspost R1	137	+22	Q25c	3.6	11.8
£35	£11¼	W. Drie R1	£16½	+1	Q335c	1.5	13.1
315	68	Western Areas R1	148	+11	‡Q52c	1.4	‡
£15¼	400	Western Deep R2	700	+30	‡Q[illegible]	1.6	‡
290	100	Zandpan R1	148	+12	Q31½c	ϕ	13.7

O.F.S.

1976 High	Low	Stock	Price	+ or −	Div Net	Cvr	Y'ld Gr's
170	60	Free State Dev. 50c	83	+5	Q9c	0.6	7.3
£22½	715	F S Geduld 50c	£11⅛xd	+1	Q200c	ϕ	0.6
200	50	F S Saaiplaas R1	120	+20	7bc	U	3.2
465	170	Harmony 50c	270	+20	‡Q65c	ϕ	‡
195	38	Loraine R1	98	+14	Q6c	0.5	4.0
£18½	675	Pres. Brand 50c	925xd	+50	Q170c	ϕ	3.2
£13	395	Pres. Steyn 50c	565xd	+45	Q45c	ϕ	5.2
£23¼	750	St. Helena R1	£10xd	+½	Q170c	ϕ	11.0
274	70	Unisel	104	+6	—	—	—
330	140	Welkom 50c	195xd	+10	Q15c	ϕ	‡
£25½	950	W. Holdings 50c	£14¼xd	+1	Q310c	ϕ	0.1

FINANCE

1976 High	Low	Stock	Price	+ or −	Div Net	Cvr	Y'ld Gr's
535	315	Ang. Am. Coal 50c	410	+10	MQ38c	2.8	6.0
375	185	Ang. Amer. 10c	235	+10	Q33c	1.9	9.1
£28¾	£10½	Ang. Am. Gold R1	£13	+¾	‡Q250c	1.3	‡
£13¼	850	Ang-Vaal 50c	950	+25	Q105c	ϕ	7.4
199	114	Charter Cons.	117		6.76	2.4	8.9
220	128	Cons. Gold Fields	146	+5	†7.37	4.3	7.8
23½	13	East Rand Con. 10p	15	+½	1.0	ϕ	10.3
330	150	Geduld Inv. R1	195	+5	Q40c	1.5	13.3
£25	£12¾	Gen. Mining R2	£14xd	+¼	Q210c	2.1	9.7
900	675	Gold Fields S.A. 25c	900	+50	Q155c	ϕ	11.1
£24	£11½	Jo'burg Cons. R2	£14¼	+¼	Q170c	ϕ	7.5
380	200	Middle Wit 25c	250	+25	Q35c	ϕ	7.2
250	168	Minorco SBD1.40	194	+4	Q2c	0.7	0.6
160	56	New Wit 50c	60	+4	Q18c	1.0	14.6
£12¾	770	Patino NV Fls.5	£12¼	+¼	QC65c	0.8	3.0
810	310	Rand Selection 50c	365	+5	‡Q75c	1.5	‡
543	385	Selection Trust	410	+10	15.2	1.5	5.7
230	98	Sentrust 10c	135	+8	Q30c	1.4	14.4
66	40	Silvermines 2½p	40		Q4.61	1.6	12.0
175	95	SW Africa 20p	175		†17.37	2.0	15.7
£12½	700	T'vaal Cons. Ld. R1	975	+25	Q65c	2.0	4.3
310	110	U C. Invest R1	135	+10	‡Q36c	1.0	‡
465	175	Union Corpn. 6.25c	200xd	+15	tQ36c	1.4	11.6
90	45	Vogels 2½c	75	.....	†Q6½c	1.2	5.6

DIAMOND AND PLATINUM

1976 High	Low	Stock	Price	+ or −	Div Net	Cvr	Y'ld Gr's
£32½	£17½	Anglo-Am. Inv. 50c	£21¼xd	+¾	†Q2½c	1.6	7.4
122	68	Bishopsgate Plt. 10c	96	+3	Q8.0c	ϕ	5.4
335	187	De Beers Df. 5c	207xd	+5	Q28c	2.2	8.8
£14	850	Do. 40pc Pf. R5	975		Q200c	ϕ	13.2
128	69	Lydenburg 12½c	82	+2	†Q2.9c	1.5	2.3
118	107	Rus. Plat. 10c	114	+3	gQ5c	—	2.8

CENTRAL AFRICAN

1976 High	Low	Stock	Price	+ or −	Div Net	Cvr	Y'ld Gr's
165	53	Coronation 25c	82xd	+8	‡Q34c	2.1	‡
127	68	Falcon Rh. 50c	115xd	+20	Q35c	ϕ	—
19	9	Rhod'n Corp. 16⅔p	18	+3	0.56	6.0	4.8
195	120	Roan Cons. K4	140	.....	‡Q16.0	4.7	‡
178	140	Tanganyika 50p	174	+6	Q10.0	0.8	5.7
70	65	Do. Pref. 80p	70	.....	Q9	10.2	10.7
48	25	Wankie Col. Rh.1	46	+6	†Q6½c	1.3	10.0
46	24	Zam.Cpr.SBD0.24	25	.....	—	—	—

AUSTRALIAN

1976 High	Low	Stock	Price	+ or −	Div Net	Cvr	Y'ld Gr's
33	18	Acmex 25c	25	....	—	—	—
307	132	A. M. and S. 50c	295	.....	ϕ†Q7c	ϕ	1.5
165	96	Bougainville 50c	132	+1	Q10c	ϕ	4.9
235	145	BH South 50c	205	....	—	—	—
75	15	G M. Kalgoorlie $1	15	.....	—	—	—
106	58	Hampin Areas 5p	105	+1	1.3	3.1	1.9
86	38	Metals Ex. 50c	64	..	—	—	—
20	12	Metromar 20c	13	.. ..	—	—	—
294	200	M.I.M. Hldgs. 50c	239	..	Q4½c	ϕ	1.2
105	60	Mount Lyell 25c	66	+6	—	—	—
3	2	Newmetal 10c	2	..	—	—	—
226	138	North B. Hill $1	204	−3	Q9c	ϕ	2.9
9	5	Nth. Kalgurli	7½	−½	—	—	—
112	65	Oakbridge $A1	98	−3	Q9c	ϕ	6.0
36	14	Pacific Copper 25c	26	−1	—	—	—
£19½	725	Pancont'l 25c	£11¼	+¼	—	—	—
17	9	Paringa M&Ex. 5p	13½	.....	—	—	—
615	430	Peko-Wallsend 50c	555	... ..	Q15c	ϕ	1.7
300	60	Poseidon 20c	75	+10	—	—	—
13	9	Vultan Min. 50c	10	.....	—	—	—
9	4	Westmex 10c	7	....	—	—	—
*199	127	Westn. Mining 50c	168xd	+1	Q5c	ϕ	1.9
75	36	Whim Creek 20c	60	.....	—	—	—

TINS

1976 High	Low	Stock	Price	+ or −	Div Net	Cvr	Y'ld Gr's
45	28	Amal. Nigeria	33	.....	5.62	1.6	26.2
298	160	Ayer Hitam	270	....	23.0	ϕ	13.1
30½	17	Berali Tin	26	+1	1.75	2.8	10.4
405	315	Berjuntai SM25	380	.....	QSM1.5	ϕ	8.9
18	12	Ex Lands 10p	12	....	1.0	1.7	12.8
265	155	Geevor	205	....	5.0	ϕ	3.8
14	6	Gold & Base 12½p	9		—	—	—
250	170	Gopeng Cons	195	−5	‡11.0	1.3	‡
80	64	Hongkong	73	.. ..	—	—	—
70	56	Idris 10p	60	.....	7.15	1.5	19.3
7½	6	Jantar 12½p	6	....	—	—	—
42	31	Kamunting 15p	33	...	‡7.0	1.2	‡
250	135	Killinghall	235	.....	Q50.0	1.2	21.3
228	168	Malay Dredging	187	... ...	10.7	2.0	8.8
38	20	●Pahang	27#	.....	‡Qh2.6	ϕ	‡
55	40	Pengkalen 10p	48	.....	‡7.0	1.5	‡
130	104	Petaling SM1	125	....	Q12½c	—	2.2
46	19	Saint Piran	30	.....	1.25	2.5	6.4
100	64	South Kinta (10p)	68	.....	‡9.5	1.5	‡
193	105	Sthn. Malayan	145	.....	10.7	0.9	11.4
45	31	Sungei Besi 20p	32	.....	—	—	—
42	29	Sungei Way SM1	42	.....	ZQ10	—	5.4
48	40	Tanjong 15p	43	.....	4.0	0.9	16.6
52	40	Tongkah Hrbr. SM1	42	.....	‡Q23⅓c	0.6	13.6
110	58	Tronoh	87	.....	†4.29	2.0	7.6

COPPER

1976 High	Low	Stock	Price	+ or −	Div Net	Cvr	Y'ld Gr's
85	35	Botswana RST R2	56	+2	—	—	—
335	170	Messina R0.50	205	+15	†Q35c	1.9	11.0

MISCELLANEOUS

1976 High	Low	Stock	Price	+ or −	Div Net	Cvr	Y'ld Gr's
10	8	Burma Mines 17½p	8½	.....	0.1	ϕ	2.0
*35½	18½	Charterhall 5p	18½	....	—	—	—
990	580	Cons. Murch. 10c	600	+30	†Q80c	1.8	7.6
310	245	Northgate C$1	310	+5	—	—	—
239	153	R.T.Z.	165	.....	5.42	2.1	5.0
112	80	Sabina Inds. C$1	80		—	—	—
£15⅞	£10	Tara Expln. $1	£10⅛	+⅛	—	—	—
45	32½	Tehidy Minerals 10p	42	.....	h1.08	ϕ	4.0
145	84	Yukon Cons. C$1	138	−2	—	—	—

NOTES

Unless otherwise indicated, prices and net dividends are in pence and denominations are 25p. Estimated price/earnings ratios and covers are based on latest annual reports and accounts and, where possible, are updated on half-yearly figures; they are adjusted to ACT of 35 per cent. P/Es are calculated on the basis of net distribution; bracketed figures indicate 10 per cent. or more difference if calculated on "nil" distribution. Covers are based on "maximum" distribution. Yields, assuming maintenance of net dividends on current rate of ACT, are based on middle prices, are gross and allow for value of declared distributions and rights. Securities with denominations other than sterling are quoted inclusive of the investment dollar premium.

- A Sterling denominated securities which include investment dollar premium.
- ● "Tap" Stock.
- * Highs and Lows marked thus have been adjusted to allow for rights issues for cash.
- † Interim since increased or resumed
- ‡ Interim since reduced, passed or deferred.
- ‡‡ Tax-free to non-residents.
- ϕ Figures or report awaited.
- †† Unlisted security.
- # Price at time of suspension.
- ¶ Indicated dividend after pending scrip and or rights issue: cover relates to previous dividend or forecast.
- ** Free of Stamp Duty.
- ♦ Merger bid or reorganisation in progress.
- ♣ Not comparable.
- ♦ Same interim; reduced final and/or reduced earnings indicated.
- § Based on 1973 profits.
- ‡ Cover allows for conversion of shares not now ranking for dividends or ranking only for restricted dividend.
- ★ Cover does not allow for shares which may also rank for dividend at a future date. No P/E ratio usually provided.
- ♥ Excluding a final dividend declaration.
- ♠ Regional price.
- ‖ No par value

a Tax free. b Figures based on prospectus or other official estimate. c Cents. d Dividend rate paid or payable on part of capital; cover based on dividend on full capital. e Redemption yield. f Flat yield. g Assumed dividend and yield. h Assumed dividend and yield after scrip issue. j Payment from capital sources. k Kenya. m Interim higher than previous total. n Rights issue pending. q Earnings based on preliminary figures. r Australian currency. s Dividend and yield exclude a special payment. t Indicated dividend: cover relates to previous dividend, P/E ratio based on latest annual earnings. u Forecast dividend: cover based on previous year's earnings. v Tax free up to 30p in the £. w Yield allows for currency clause. y Dividend and yield based on merger terms. z Dividend and yield include a special payment: Cover does not apply to special payment. A Net dividend and yield. B Preference dividend passed or deferred. C Canadian. E Issue price. G Assumed dividend and yield after pending scrip and/or rights issue. H Dividend and yield based on prospectus or other official estimates for 1976-77. K Figures based on prospectus or other official estimates for 1976-77. M Figures based on prospectus or other official estimates for 1976. N Dividend and yield based on prospectus or other official estimates for 1976. Q Gross. T Figures assumed. U No significant Corporation Tax payable. Z Dividend total to date.

Abbreviations: xd ex dividend; xc ex scrip issue; xr ex rights; xa ex all; xd ex capital distribution.

"Recent Issues" and "Rights" Page

This service is available to every Company dealt in on Stock Exchanges throughout the United Kingdom for a fee of £325 per annum for each security

FINANCIAL TIMES
Wednesday September 22 1976

'Smith majority rule move on Friday'

BY BRIDGET BLOOM, AFRICA CORRESPONDENT — DAR-es-SALAAM, Sept. 21.

TANZANIA EXPECTS that Mr. Ian Smith, the Rhodesian Prime Minister, will announce his acceptance of a rapid transfer to majority rule in Rhodesia when he addresses the people of Rhodesia on Friday.

After one-and-a-half hours of talks with Dr. Kissinger, the U.S. Secretary of State, President of Nyerere of Tanzania, said to-day it was his belief that Mr. Smith "is going to make it quite clear" that he accepted "what one might précis as the Callaghan conditions" on negotiations leading to majority rule in Rhodesia.

These conditions, laid down on March 22 by Mr. Callaghan when he was Foreign Secretary, essentially provide for majority rule in Rhodesia within 18 months to two years.

Dr. Nyerere's optimism to-day that negotiations with Mr. Smith are now possible contrasts starkly with his pessimism only a week ago.

The Tanzanian President gave one note of caution, which it must be said is emphasised even more strongly by many observers here. He now believed that Britain, the U.S. and Tanzania spoke "roughly the same language" on Rhodesia. "We understand the same thing.

"Whether Smith does I don't know. We will have to wait until Friday. In this equation Smith is the imponderable."

But his overall tone of optimism reinforces suggestions that Dr. Kissinger, together with Mr. Vorster, South African Prime Minister, was able in Pretoria last week-end to persuade Mr. Smith to agree to what amounts to a total volte face in his own Government's policy.

While Dr. Nyerere did not think that fundamentally Mr. Smith had changed, "if the United States says to Smith that the game is up, then Smith is not so foolish as not to understand that he can't go on."

Mr. Smith could find his own way, he said, of making it clear on Friday that he accepted the Callaghan conditions. These, Dr. Nyerere made clear, would then be the basis of negotiation, "not a settlement."

The next step would be a constitutional conference called and probably chaired by Britain, in London or elsewhere.

The conference would be between representatives of the African Nationalists and the white Rhodesians. Dr. Nyerere did not rule out a role by Mr. Smith in this conference. "Someone," he said, "would have to represent the Government of Rhodesia. The composition of their delegation is up to them."

Guerilla role

On the African side, the President said, it was not necessary that the Nationalists formed a single party, but he hinted that the guerillas must endorse, if not participate in, the conference.

Among its first tasks would be to reach agreement on forming a provisional Government which would have an African majority. It would be this Government which would call off the guerilla war. The other tasks would be to work out a clear majority-rule constitution and set a date for independence.

Dr. Nyerere was not wholly specific about a timetable for independence. However, he pointed out that Mr. Joshua Nkomo, widely considered the most moderate Nationalist leader, had said yesterday he thought that there should be only nine to 12 months' transition.

On Namibia Dr. Nyerere seemed less optimistic. He suggested that South Africa had still not accepted that a constitutional conference had to be held between itself the main Nationalist party, SWAPO, and the UN.

● Dr. Kissinger later arrived in Kinshasa, capital of Zaire, from Tanzania, on his African peace mission.

● Our Salisbury correspondent wrote last night: The Rhodesian Cabinet met for three-and-a-half hours this morning to discuss Dr. Kissinger's settlement proposals. Mr. Smith told newsmen it had been a "good meeting with straight talking as usual," but refused to say whether the Cabinet had accepted the proposals.

"You don't accept big proposals in a rush. We're going to take our time. The Cabinet Ministers have got papers with them and will think about them this afternoon and to-night." The Cabinet meets again to-morrow morning.

Mr. Smith would not disclose whether there had been differences of opinion at to-day's meeting, attended by the 15 white and four black Ministers, or whether he had recommended the proposals to the Cabinet.

He emphasised that the final decision was up to the Rhodesian Front party caucus on Thursday.

SUITS chief faces Stock Exchange probe

BY MARGARET REID

THE STOCK Exchange Council yesterday set up a top-level three-man committee to investigate share dealings over the past 18 months in Scottish and Universal Investments by the chairman, Sir Hugh Fraser, and other directors.

The importance which the exchange attaches to the matter is underlined by the fact that the inquiry is to be presided over by Mr. David LeRoy-Lewis, until recently one of its deputy chairmen and now chairman of jobbers Akroyd and Smithers. The other members are brokers Mr. Richard Lawson, of W. Greenwell, and Mr. Patrick Mitford-Slade, of Cazenove.

The move follows widespread anxiety among institutional investors about the mis-classification as cash in "SUITS" 1975 accounts of loans totalling £4.7m. —of which £4.2m. has since been written off—and about directors' share sales before this was disclosed.

The company's auditors, City accountants Touche Ross, are resigning because they failed to notice the erroneous classification of the loan which they said arose from a straightforward clerical error by SUITS.

Sir Hugh, who owns some 10 per cent. of SUITS shares, while his family interests control another 23 per cent., said yesterday that he welcomed the Stock Exchange inquiry. "I am delighted I have nothing to hide."

Over the 18 months from March, 1975, Sir Hugh sold 1.55m. SUITS shares. He added yesterday that full details of his dealings in the shares had already been sent to the company through their brokers Grieveson Grant.

Resignation

On the mis-classification of the loan, he has said: "It was a stupid mistake. In no way was this deliberately concealed."

Sir Hugh, who has already said he is resigning as managing director, promising a "radical reassessment of the management structure," referred again yesterday to his willingness to resign as chairman if shareholders wanted this—and added that he would not vote his family shareholding of 33 per cent. against any such move.

"If the shareholders wish me to resign as chairman, of course, I will do so. I would not vote my shares or those of my family and trusts in my favour. The decision would be made by the remaining 66⅔ per cent." he added.

Sir Hugh said that he was coming to London from Glasgow for a meeting to-morrow morning with the informal committee of institutional shareholders set up to look into the matter. That afternoon he is to meet Mr. David Hopkinson, chairman of the management side of the big M. & G. unit trust group, which holds 5 per cent. of SUITS shares.

Loan

Apart from Sir Hugh, two other directors, Mr. Angus Grossart, who heads the Edinburgh merchant bank Noble Grossart, and Mr. Nicholas Redmayne, of Grieveson Grant, sold some SUITS shares in 1975-76.

The controversial £4.2m. loan, since written off, was made to Amcal, a company jointly owned by Amalgamated Property and Investment, now in liquidation, and another company in which Sir Hugh and Mr. Grossart have interests.

The Stock Exchange said yesterday that the appointment of Mr. LeRoy-Lewis' committee on the share dealings followed "preliminary inquiries which have been made by the quotations committee about information revealed" in SUITS' 1976 accounts.

The Exchange added that its quotations committee was continuing to study other information revealed in the report and accounts. This is thought to be a refernce to the loan and disclosure considerations concerning it.

The LeRoy-Lewis committee is expected to publish the results of its work, which will be widely seen as a demonstration of the City's determination to operate the voluntary self-regulation of the financial system in a controversial matter.

Sir Hugh, who is seeking two new non-executive directors for the SUITS Board, said yesterday that people had been approached during the day to see if they would take on these offices.

THE LEX COLUMN

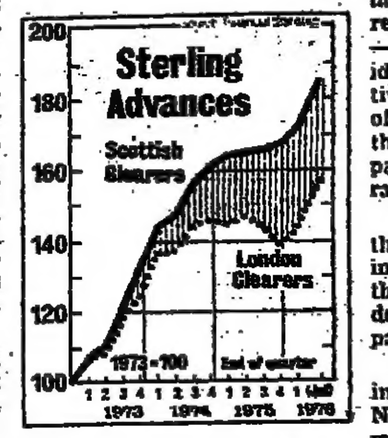
Tate takes the initiative

Tate and Lyle has played its last important card in the takeover battle for Manbre & Garton, and it looks a powerful one. Yesterday morning its brokers were sounding out possible institutional response to a higher bid and in the afternoon, when Tate decided to move up by 30p per share to 200p in cash, they had no trouble in picking up 27½ per cent. of the equity to add to the 4 per cent. of acceptances to the original offer. The fact that such a proportion of the major shareholders were prepared to commit themselves at this stage suggests that the time for talking may be over.

Before the higher bid emerged yesterday a statement from Manbre promised that a forecast for the year to October 1977 would be published next week and would show a material improvement in dividends and profits. Even on historic figures the p/e is no more than 10.9 and the yield 7.7 per cent. but Manbre will have to come up with something exceptional to regain the initiative. The bid still looks attractive from Tate's point of view offering £47.8m. cash for over £10m. of pre-tax profits.

Last night's other major bid story—the offer by APV for Hall-Thermotank—is a much more tranquil affair since it has been irrevocably accepted by 53 per cent. of the equity. The deal appears to make financial sense—£11.3m of shares and convertible for a group with profits of over £3m., net worth of more than £12m. and substantial overseas sales. There seems to be some commercial rationale too, and APV's takeover record is a sound one.

Index rose 6.1 to 345.8



Bank of Scotland

Bank of Scotland's performance continues to be dogged by the need for extra pension provisions — a hangover from the 1969 takeover. As it is, a rise of 12 per cent. in interim pre-tax profits to £11.2m., over the second-half of last year, reflects almost entirely the absence of bad debt provisions.

By comparison with the second-half of 1975-76, the first six months of this year saw a virtual standstill in growth. Average base rate slipped by 0.5 per cent. to around 10 per cent. and staff costs rose 10 per cent. Last year's buoyant trend in customer deposits has continued but bank advances continue sluggish. The only bright spot is on the international side where Scottish banks' foreign currency lending has risen by over one-third since the start of the year. Of the two major subsidiaries, which contribute roughly a third of profits, Northwest Securities has continued to recover while Bank of Scotland Finance — the merchant bank — has marked time. Pre-tax profits of £25m. for the year, look possible, but the message from these figures is that Scottish banks are no longer outperforming their London rivals.

Financing industry

"Are you thinking of industrial investment in Great Britain?" read the headline of an advertisement placed in Monday's Wall Street Journal by the National Coal Board Superannuation Scheme and the Mineworkers' Pension Fund. The text goes on to offer long- and medium-term finance for companies wishing to expand, re-equip, or set up manufacturing units in the U.K.

This is an extension of an idea which the NCB funds have been offering U.K. borrowers for some time: so far without too much success: advances of around £10m. are currently under negotiation. However, the funds seem ready to make a substantial commitment—up to £80m. is suggested—and to be very flexible in the kind of finance they might offer.

They suggest, for instance, that a package might be made up of a sale and leaseback arrangement on land and buildings, coupled with finance up to 12 years for plant equipment. They will consi[der] fixed or floating rate terms may be willing to roll up ca[pital] repayments — and even inte[rest] — during the early years. The idea seems to be to charge relatively low rates through the of the loan, and make up the shortfall by some form participation — in future rather than earnings.

That will make borro[wers] think a little, during a period inflation and price controls, the idea seems to be a g[ood] deal more imaginative than paintings.

Still on the subject of financing industry, one cannot let NEB's interim "profits" ment pass without comm[ent]. The figures depend alm[ost] entirely on the consolidation British Leyland, and are m[ean]ingless: what is needed source and use of funds ta[ble].

BICC

BICC's first-half profits ahead of most market expe[ctations], but the tax charge rising sharply and for 1976 ings per share are not goin[g to] make much headway. In at 104p—up 6½p yesterday— prospective p/e on ave capital is around 10½, which built on hopes for an upturn world-wide demand for ca[ble] during 1977. This year gro[up] volume has been static at b[est] and probably down for ca[ble] with most of the half-year profit gain from £17.8m. £20.8m. pre-tax coming from recovery in construction from the international side exchange profits. Higher co[pper] prices will start to feed working capital levels in current half; and the losses Portugal need to be clari[fied]. The 1976 yield is around 10 cent. and likely to be th[e] covered.

Eagle Star

Eagle Star's underw[riting] performance is mildly appointing, with losses from £1.5m. to £4.8m. in the year even though the direct of January's storms was charg[ed] to the previous year's figu[res]. But Grovewood Securities going well, and an over profits rise of about a quar[ter] still looks feasible for the leaving a prospective p/e about 7½ at 105p.

U.K. wins £34m. machine order from Poland

BY KENNETH GOODING, INDUSTRIAL CORRESPONDENT

POLAND HAS placed orders for £34m. of U.K. machinery in connection with the expansion of its automotive and tractor industries.

Letters of intent have been signed with three U.K. companies covering machine tools worth more than £20m. and, according to Massey-Ferguson-Perkins, which has tc contract to reconstruct the Polish tractor industry, this should be followed by a flood of orders to Britain during the next three months. This could make difficulties for British Leyland's car division when, eventually, it begins to order the machine tools it requires.

British manufacturers expect to receive machine tool orders worth £100m. from the tractor project.

An announcement is also being made to-day by Guest Keen and Nettlefolds that it is to build a £14m. bearing plant for Poland to increase the capacity for diesel engine and automative bearings there.

Delivery of equipment should start in a year's time with the plant coming on stream early in 1979.

The Polish orders are a much-needed boost for the U.K. machine-tool industry, whose orders on hand have shrunk to near an all-time low in real terms this year. The news comes on the opening day of the exhibition, MACH 76, at the National Exhibition Centre in Birmingham.

The Poles have signed letters of intent with Matrix Churchill, part of the Tube Investments group, for the supply of special machines, and with Cross International (U.K.) and Kearney and Trecker Marwin for transfer line equipment. KTM has just been taken out of State control and is now part of the Vickers engineering group.

Some 5,000 machine tools covering a wide range will be installed in a five-building complex at the Ursus tractor plant near Warsaw.

As the first orders show, the deals seem more likely than ever to produce the kind of embarrassing situation over British Leyland which the U.K. machine tool industry hoped to avoid. The Poles are requiring just the type of equipment Leyland's car division will need.

Total U.K. exports of machine tools last year were £160m. and unofficial estimates put the annual capacity for special purpose machine tools at about £80m., or less than one third of total U.K. manufacturing capacity.

Manufacturers preparing for the exhibition here believe that the first car division orders will be placed next month. This might well be too late, because the U.K. industry has had to look particularly to the Comecon and OPEC countries for orders during the recession.

"Companies have been involved in a great deal of expense in production engineering, executive time and so on in connection with programmes about to start in Yugoslavia and Romania as well as from Poland, and they will be very reluctant to throw away that investment to cope with Leyland's requirements," said one major manufacturer.

Survey, Pages 19-26

Allende man killed in U.S. bomb attack

BY JUREK MARTIN, U.S. EDITOR — WASHINGTON, Sept. 21.

SENOR ORLANDO LETELIER, a former close associate of the late President Allende of Chile, was assassinated here this morning when the car in which he was riding was blown up by a bomb. One of his travelling companions was killed and another injured.

Sr. Letelier had served as Foreign Minister in 1973 under President Allende and before that as Chilean Ambassador to Washington.

He was arrested after the coup three years ago and detained under duress for some time before being released, following the intervention on his behalf of the Venezuelan Government.

Of late he has been one of the most vocal critics of General Pinochet's junta, living abroad, to the extent that earlier this month he was stripped of his Chilean nationality.

In Washington he had been a leading lobbyist arguing against U.S. military aid to Chile and enjoyed a number of close contacts on Capitol Hill.

He taught at American University here and served as director of the Transnational Institute of Policy Studies.

Sig. Letelier's associates immediately charged that his murder was the work of agents of Dina, the Chilean secret police.

The assassination was compared with that of General Carlos Prats, the Chilean military commander, who was killed in Buenos Aires in 1974 (also by a car bomb) and the attempt on the life of Bernardo Leighton, the former Christian Democratic vice-president, in Rome last year.

The State Department said that it was gravely concerned at Sr. Letelier's death, and not simply because his car was blown up while moving along Massachusetts Avenue, generally known as "Embassy row" here.

There is likely to be a hue and cry on Capitol Hill over the assassination. The Administration has so far this year quelled all Congressional attempts to interfere with its policy of commercial and, in some instances, military aid to Chile but a once quiescent opposition is now likely to become more vocal.

Chilean exile sources in New York are said to be becoming increasingly nervous that action might be taken against them. It has been suggested that an organisation to conduct acts of terror against leading anti-junta activists had already been formed in the U.S.

The assassination of General Prats in Buenos Aires is considered to have been the work of the Argentine anti-Marxist alliance, which was closely connected with Sr. Lopez Rega, who was known to be sympathetic to the Pinochet regime.

Scunthorpe trouble cuts BSC output

BY IAN HARGREAVES, LABOUR STAFF

THE BRITISH Steel Corporation's iron-making problems, severely heightened by the halting of Llanwern's major blast furnace earlier this month, have been made worse by a fall in iron output at its largest and most modern steel works at Scunthorpe.

Scunthorpe's problems chiefly result from two of its 10 blast furnaces being out of service for relining. There are also constant technical difficulties associated with the use of domestic iron ore, which, at Scunthorpe, is mixed with imported ore.

The result has been a shortfall in steel production at Scunthorpe of 100,000 tonnes since April, a major contribution to the total BSC deficit of 250,000 tonnes. This figure, calculated at the end of last month, will have been made worse by the breakdown at Llanwern.

This combined shortage makes it increasingly unlikely that BSC will break even this year after its £255m. loss last year. Its overall target for the year is 22.8m. tonnes and any substantial deficit will rule out a break-even result.

Even with maximum iron output from its furnaces Scunthorpe would be falling 1m. tonnes a year short of its 6m. tonnes steelmaking capacity.

The only long-term answer is to build a large Llanwern-style furnace. Scunthorpe will be pressing for the inclusion of such a scheme in BSC's rolling five-year plan next year.

A bright spot, though, is the formal opening to-day of a £35m. No. 2 rod mill at Scunthorpe. This mill, with the existing No. 1 mill, will give the plant a combined annual capacity of 1.1m. tonnes of steel rod, [illegible]oying some of the most [illegible]ted rod technology in

S.E. List Pre.

...rticularly pleased ...ing arrangements Craversion new mill, whose annual 600,000-tonne output will be achieved with only 310 employees.

Scunthorpe now boasts that at 300 tonnes of liquid steel per man-year its productivity matches the best in Europe. The figure is significantly higher than the BSC average.

Most of the men employed at the new rod mill once worked at BSC's Normanby Park mill which closed over a year ago. That plant had "all the usual overmanning problems of an old style works," says the Corporation.

The fact that the men had so rapidly adapted to reduced manning levels throughout the course of redevelopment at Scunthorpe was the key to the division's profitability record, it added.

The main design features of the mill are its rolling capacity of 200 feet per second, its "no twist" rolling blocks, a cooling system which cuts scale formation and the flexibility of product gauge available (up to 4,000 lbs in a five range from 5.5 mm to 13 mm). Four computers control the operation.

The corporation hopes to increase its export penetration in Europe and the U.S. as a result of the commissioning of the rod mill, although over-capacity in the European market presents problems.

Of special concern is the fact that the corporation is unlikely to be able to implement the 10 per cent. price increases announced for October for more than a fifth of its wire rod products because of lack of buoyancy in the market. It hopes that the price increases will be acceptable by the end of the year.

To follow the opening of the rod mill, BSC plans to invest a further £76m. at Scunthorpe in steel billet production over the next three years. The plant's total contribution to BSC's 22.8m. tonnes target this year will be 4.8m. tonnes of steel.

Continued from Page 1

Workless

by the British Leyland dispute and the end of holidays.

Against this, the level of unemployment has also been affected by special measures which some observers have suggested may have reduced the peak at the expense of lengthening the recovery period.

The new move to offer "work experience" to unemployed teenagers, will not affect the figures. Other measures have had a significant impact.

The temporary employment subsidy, for example, has already covered nearly 114,000 jobs and it is thought that with three more months to go the total could reach 180,000 against the original estimate of 120,000. Under job creation schemes, projects have been started providing over 29,000 jobs, with further projects approved providing over 41,000 jobs.

Philip Rawstorne writes: Mr. James Callaghan is to lead a determined effort to quell Left-wing opposition to the Government's economic policies, sharpened by yesterday's unemployment figures, before the Labour Party conference opens next week.

The Prime Minister has given top priority to blocking a move by leading Left-wingers at Friday's pre-conference meeting of the party's National Executive Committee to force a conference vote on a motion attacking the Government's expenditure cuts.

Mr. Callaghan, who called a number of senior Ministers, including Mr. Denis Healey, the Chancellor, and Mr. Albert Booth, Employment Secretary, to Downing Street yesterday to review the situation, will attend the meeting in Blackpool in spite of Dr. Henry Kissinger's visit to London that day to discuss Rhodesia developments.

Contingency plans are being made for the Prime Minister to return to London afterwards to meet the U.S. Secretary of State, who will be having talks with Mr. Anthony Crosland, the Foreign Secretary.

Weather

U.K. TO-DAY

CLOUDY, with some rain.

London, E., S.E., Cent. S. England, E. Midlands

Mainly dry. Max. 18C (64F).

N.W., N.E., Cent N England, W. Midlands, Borders, Edinburgh, Dundee, S.W. Scotland, Glasgow

Outbreaks of rain. Max. 17C (63F).

Channel Islands, S.W. England, N. Wales, Is. of Man, N. Ireland S. Wales

Sunny intervals, showers possibly thundery. Max. 17C (63F).

Aberdeen, Cent. Highlands, Moray Firth, N.E., N.W. Scotland, Argyll, Orkney

Outbreaks of rain. Max. 14C (57F).

Outlook: Showers, bright intervals.

Lighting-up: London 19.29, Manchester 19.39, Glasgow 19.44, Belfast 19.34.

BUSINESS CENTRES

	Y'day Mid-day	°C	°F		Y'day Mid-day	°C	°F
Amstrdm.	S	17	63	Manchstr.	C	19	66
Athens	S	22	72	Melbourne	R	13	55
Barcelona	S	24	75	Milan	F	18	64
Belfast	R	13	55	Montreal	C	10	50
Belgrade	C	14	57	Moscow	F	13	55
Berlin	C	15	59	Munich	F	14	57
Birmghm.	C	20	68	Newcastle	C	16	61
Bristol	F	19	66	New York	C	20	68
Brussels	S	16	61	Oslo	S	14	57
Budapest	C	15	59	Paris	S	21	70
B. Aires	S	23	73	Perth	S	21	70
Cairo	S	32	89	Prague	C	13	55
Cardiff	C	18	64	Reykjavik	R	9	48
Cologne	S	19	66	Rio de J'o	S	25	77
Copenhgn.	F	16	61	Rome	S	23	73
Dublin	R	14	57	Singapore	S	29	84
Edinburgh	R	17	63	Stockholm	S	14	57
Frankfurt	F	17	63	Strasbourg	S	18	64
Geneva	S	15	59	Sydney	C	[illegible]	[illegible]
Glasgow	R	15	59	Tehran	S	29	84
Hong Kong	C	27	80	Tel Aviv	S	27	81
Jo'burg	S	26	79	Tokyo	C	23	73
Lisbon	F	23	73	Toronto	C	13	55
London	F	21	70	Vienna	C	14	57
Luxemb'g	S	16	61	Warsaw	S	17	63
Madrid	S	25	77	Zurich	F	13	55

HOLIDAY RESORTS

		°C	°F			°C	°F
Ajaccio	S	21	70	Jersey	F	20	68
Algiers	S	28	82	L. Palmas	F	24	75
Biarritz	S	19	66	Locarno	F	19	66
Blackpool	C	17	63	Majorca	S	25	77
Bordeaux	S	24	75	Malaga	S	24	75
Boulogne	S	20	68	Malta	S	25	77
Casablnca.	F	23	73	Nairobi	C	20	68
Cape Tn.	C	20	68	Naples	S	24	75
Corfu	F	22	72	Nice	F	21	70
Dubrovnik	S	21	70	Oporto	C	19	66
Faro	S	25	77	Rhodes	S	25	77
Funchal	S	26	79	Salzburg	S	16	61
Gibraltar	S	23	73	Tangier	S	24	75
Guernsey	S	17	63	Tenerife	C	20	68
Innsbruck	C	16	61	Tunis	F	24	75
I. of Man	R	13	55	Valencia	S	26	79
Istanbul	S	21	70	Venice	F	21	70

S—Sunny. F—Fair. C—Cloudy. R—Rain.

Registered at the Post Office. Printed by St. Clement's Press Ltd. for and published by the Financial Times Ltd., Bracken House, Cannon Street, London EC4P 4BY.
R